THE

Panama Canal

its history, its political aspects, and financial difficulties

by

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PREFACE.

In December 1879 I accepted a special commission from my friend, the editor of the New York World, to go to Panama, meet M. de Lesseps, who was expected there, and write my impressions on his canal scheme in its different bearings. In studying the way in which that enterprise was launched I was led into a most mortifying disappointment, for the whole project of the great promoter seemed to me to have been undertaken without any serious studies, and indeed without the common precautions taken by any responsible contractor in works of much less magnitude. Without expressing any opinion on the much-debated question, whether the canal by the Panama Railway line is practicable or not, from the engineer's point of view, what had become patent to me was, that people were enticed to go blindly into that scheme. I wrote at great length in that sense for the World, and I also contributed at the time some editorial matter on the subject for the New York Nation.

Since then I have accompanied, with the interest of a
student, the development of the enterprise of M. de Lesseps, and what in 1880 might have been a first impression has ripened into a full-grown conviction. When, therefore, the editor of the London *Financial News* last May asked me if I would prepare for his paper a series of articles on the Panama Canal, in which I should frankly state what I thought to be the true condition of the company, I was glad to avail myself of the opportunity thus afforded me to put together some observations that I had been noting for the last five years. Those articles are now, with the permission of the editor, collected in this volume.

Had I thought that those articles would eventually be given the more permanent form under which they are now reprinted, a somewhat different method in dealing with the subject would have been followed. To re-write them would, however, require more time than I can conveniently spare, and thus they have been merely revised. The able editorial comments which appeared along with them were not mine, and of course they are not reproduced in these pages.

The task of writing against the management of the successful hero of the Suez Canal is indeed arduous and thankless. It is therefore very gratifying to me that, since these articles were prepared, the *Economiste Français* has published, on August 8th and 15th, a comprehensive study on the Panama Canal, in which the writer, who is M. Paul Leroy-Beaulieu, arrives at some of the con-
conclusions that I have been led to. The chief editor of that respectable journal thinks that unless the company is thoroughly re-organized, "we shall see the most terrible financial disaster of the nineteenth century." Analyzing some of the promises of his great countryman, he arrives at the conclusion that "chaque parole de M. de Lesseps est démentie au bout de quelques mois." He shows very lucidly how preposterous it is to compare Suez to Panama, and to expect from the latter a traffic of 6,000,000 net tons, when Suez has but 8,000,000 tons; and a gross income of £3,600,000, when that of Suez was but £2,600,000 in 1884. Moreover, M. Leroy-Beaulieu finds "obviously absurd" the proposed tariff of 15f. per ton for Panama, against 8f. for Suez, and he thinks that at that rate Panama will attract, if ever completed, but 1,500,000 tons; although in my own estimate of the probable business of the canal, I have taken for granted that M. de Lesseps will have 5,000,000 tons at 15f. each—that is to say, that his gross receipts will be £3,000,000, when those of the Suez Canal, sixteen years after its opening, and uniting, as it does, the most populous countries on the earth, and some of the richest colonies of European States, is yielding only £2,600,000.

I am sure that if other editors will investigate this subject fearlessly, they will come into perfect agreement with M. Leroy-Beaulieu. What he now finds out has been palpable to every student of the matter for years. But it must require great courage to tell in France the whole
truth about the Panama Canal; for even in foreign countries there is much prejudice to contend with about the energy and great deeds of M. de Lesseps. For my own part, I will bear with equanimity the temporary odium that the result of the present investigation may bring on me. I know that I was right in 1880, and I firmly believe that I am right now.

J. C. R.

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THE PANAMA CANAL.

INTRODUCTION.

We doubt very much whether the truth about the Panama Canal has ever been frankly told. To a certain extent the whole world is interested in the project just because it is most difficult of realization, and because of the blind faith that every one is inclined to place in the indomitable energy of Ferdinand de Lesseps, the hero of Suez. But after all, when we leave aside all that is legendary about that really remarkable financial diplomatist, the gigantic undertaking of piercing the isthmus in Central America should be studied in the light of plain facts. Faith in M. de Lesseps may prompt us to say to the granite mountain at Culebra, "Be thou removed, be thou cast into the sea;" but there will always be left in the minds of those who are not French a seed of doubt which will prevent them from believing that such thing will come to pass, and that the immense difficulties, physical, financial, and political, will be removed by mere blind faith. And when we come to consider the Panama Canal Company as it is, the manner in which it came into existence, and the destiny that events are preparing for it, if we only keep open the safety-valve of unreasoning enthusiasm, and free ourselves from the spell of M. de Lesseps' name, we find that, while the scheme is
one of gigantic proportions, it is also one of colossal, if not insuperable, difficulties.

A fervid imagination may depict M. de Lesseps, in the robes of the High Priest of Civilization, officiating at the “marriage of oceans” or at the “divorcement of continents.” But sober judgment will find in him the plain promoter, who never made a serious study of the scheme; who, encouraged by his own excessive vanity on one side and the fulsome flattery of his countrymen on the other, has allowed himself to be used as a tool in the hands of ambitious people, who, in plain words, bought his name in order that they might enrich themselves out of the savings of the artless and enthusiastic mass of his own countrymen.

We propose to give a general review of this matter of interoceanic communication in Central America, and particularly of the Panama Canal Company. The limited space at our disposal will compel us to be much too concise; but we hope, nevertheless, to be able to leave upon the mind of the reader a truthful idea of the whole range of that question in its many-sided phases. After sketching the various efforts for exploring the isthmus wherever a canal was thought practicable, we shall have to treat of the interest that the United States Government has always shown in such communication, and how that interest has been manifested by repeated utterances of its leading statesmen of all times, and by expensive and exhaustive explorations. We will then accompany our French friends to the isthmus and see what they knew of it, and how they obtained a concession from Colombia, and, having it in their pockets, hired M. de Lesseps’ influence, and, in order to attract capital, convened a “congress” to decide upon the best route—the United States officers at that time having pronounced themselves
INTRODUCTION.

for the Nicaragua route, for which our French promoters had no concession; and how such a packed congress was made to decide for the route of the organizers of the congress. We will then go with M. de Lesseps to America, after his first failure, and see how he played his part there; and then coming back with him, we shall have to record the triumph of the promoters in getting their much-coveted money. The dealings of the company will then be studied, not only in Panama, but in Paris. We shall show what it has been doing, how much is still to be done, how much money has been spent, and how much is left with which to finish the work—if the work is ever to be finished—even if money should be forthcoming. In many respects we are at a great disadvantage in investigating these matters at this distance from Paris. There everybody is enthusiastic; almost every newspaper is enlisted actively for the canal; there is no independent criticism of any kind on the subject, and such adverse rumours about the enterprise as are concocted for special effect on the Bourse are usually so weak and senseless as to deserve no consideration from serious people; or else the strictures found in some of the newspapers are silly stories invented by themselves, so that they may give a literary raison d'être to their subsidized puffing of the maker of canals. We shall, however, do our best to probe the truth through this deep mass of imposition and trickery.

But this is not all. A study of the subject would be incomplete without a survey of its political bearings. Every one knows that but a few months ago the President of the United States concluded with Nicaragua a treaty by which that Government agreed to undertake the building of a canal through Nicaragua. The treaty was on the point of being ratified by the Senate, where
it received the warmest endorsement of its president pro tempore, Senator Edmunds, a man remarkable for his sound and conservative views, and whom the Americans recognize as one of their leading statesmen. The treaty, however, was not ratified. As a question arose as to the expediency of the United States building a canal through a part of Central America, and keeping the preponderating influence therein, in face of the Clayton-Bulwer treaty between the United States and Great Britain, it was thought better to delay a decision with regard to it until the Government at Washington should come to an amicable understanding with Great Britain.

Moreover, it must be remembered that the recent revolutionary troubles in Panama, brought about the armed intervention of the United States, and the conclusion of another treaty at Bogota, by which Colombia is said to have confirmed the treaty of 1846 with the United States; thus fully establishing the political importance which the United States Government attaches to the canal, probably because it foresees great complications in the isthmus if it does not own and absolutely control it. We propose to show how important this matter is to the United States, and how that Government has been consistently declaring its policy in the premises. Happily there is here in England little or no financial interest in the Lesseps enterprise, and we can examine it with a freedom that cannot be said to be tinged with any degree of partiality or prejudice.
CHAPTER I.

FIRST EXPLORATIONS OF THE Isthmus.

The ancient idea of a canal.—Galvão, Galistro, and Humboldt.—Nicaragua asks the United States in 1825 to build a canal.—Lloyd’s concession from New Granada.—The King of the Netherlands tries his hand in 1829.—President Jackson and Biddle.—The Solomon concession: Garella’s surveys in Panama.—Castellon and Louis Napoleon.—California and the canal.—Hughes and Barnard’s explorations for a railway.—The Panama Railway.—Vanderbilt-White’s concession.—Col. Childs’ survey of the Nicaragua route.—Description of Kelley’s munificent explorations.—Dr. Cullen’s scheme in Darien.—Gisborne.—Strain’s expedition.—Great interval of quiet.—Gogorza’s old maps: the Atrato route.

The idea of piercing the isthmus between the two Americas is almost contemporaneous with the first knowledge of the isthmus itself. The early navigators could not help noticing how near to each other were the two oceans, and how comparatively easy would be (they thought) the cutting of a canal through that narrow strip of land between them. The celebrated Portuguese navigator, Antonio Galvão, as early as 1550, wrote an essay on the subject, wherein he suggested four different lines, one of which was through the Lake of Nicaragua and the other by the Isthmus of Panama. Lopes Gomara, the Spanish historian, mentions in 1551 the four routes, of which he very likely learned from the monograph of Galvão.

The idea, however, remained dormant for fully two centuries. One of the earliest exploits of Nelson was
the attack on Port San Juan in 1779, with the ulterior purpose, it appears, of controlling the river and lake communications between the two oceans, of which the fort was supposed to be the best debouché; fever, however, decimated his crew, and he returned to England. In the meantime, Charles III. of Spain sent out the really first exploring expedition under Manuel Galistro, in 1780; but the subsequent political complications in European politics diverted attention from the project. In the beginning of our century, Humboldt, who studied on the spot the problem of piercing the isthmus, strongly indorsed its feasibility; but all Europe was then, and remained for many years afterwards, engaged in a great and general political reorganization. Most of the Spanish colonies in America threw off the yoke of the mother country between 1820 and 1825, and although the first survey of any part of the isthmus did not really take place until twenty years later, the well-known configuration of the isthmus strengthened the belief in the possibility of opening a canal, and the question was now and then ventilated. It is to the great credit of the Spanish Central-American republics that, as soon as they had secured their independence, they devoted themselves to the problem of procuring aid to forward the idea interoceanic communication. In 1823, Lacerda, afterwards governor of Nicaragua, called the attention of the Legislature of the republic to the subject. Two years later we find the Minister of the republic in Washington addressing a note to the Secretary of State, Mr. Clay, urging the United States to co-operate for the construction of a canal, which, he says, should have been built long before. That proposal, dated February 8, 1825, really invited the United States to conclude a treaty for a canal, so as to “perpetually secure the posses-
sion of it to the two nations.” At that time no sufficient data had been brought to light to warrant Mr. Clay in committing the United States to a policy which otherwise would have been entirely acceptable to President Adams and to the American people. Mr. Clay appointed a new Minister to Central America, and instructed him to further investigate the matter. In 1826 the Mexican Government ordered a survey of the Tehuantepec to be made by General Orbegozo, who, however, only made a casual examination.

In 1828, Bolivar, President of the republic of New Granada, gave to John A. Lloyd and to Falcmar a commission for a reconnaissance, with the immediate object of a roadway between the two oceans. They found the mean height of the Pacific at Panama to be 3.52 feet above that of the Atlantic at the Chagres mouth, and that at low water both oceans are the same quantities below their respective mean levels; and as to interoceanic communication, they seemed to favour the isthmus at its narrowest region, just where there is a depression in the great range of mountains.

One year after the return of Lloyd, the King of the Netherlands, as patron of a private association, arranged with Central America for cutting a canal, “to be opened on same terms to all nations.” But the political troubles between Belgium and Holland caused the scheme to miscarry.

For five years no effort was made that was deserving of consideration, until the United States Government despatched Charles Biddle to the isthmus as an agent to investigate what plans, surveys, estimates, &c., had been made, and to report on the expediency of opening negotiations with the Central American Government for the building of a canal. Biddle died soon after
arriving at the isthmus, but not before he had obtained for himself from Columbia a concession to build a railway across the isthmus of Panama, which act President Jackson disapproved of in strong terms.

About a year afterward the President of Central America, General Morazin, ordered a reconnaissance of the Rio San Juan route by John Bailey, an Englishman.

In 1838, New Granada, anxious to take the lead of Nicaragua, listened to the propositions of the French house of Solomon and Co., and granted it a concession to build a canal by a supposed newly discovered route, where no locks would be required. Six years later on, Louis Philippe commissioned Napoléon Garella to verify the surprising reports of Solomon's agents. Garella's investigations were perhaps the most serious that had been undertaken until that time. They constitute at least the first semblance of a regular survey. He disproved the reports submitted to him, but came to the conclusion that a canal was possible between Porto Bello and Panama, with thirty-five locks and a tunnel, 5,350 metres in extent, at an elevation of 99 metres, and about 135 feet above high water of the Pacific. The scheme, however, came to nothing.

In the same year Nicaragua gave a concession to a Belgian company, the negotiation being carried on by the Nicaraguan Minister in Paris, Castellon, but it also came to nothing. On the other hand, Marcoleta, two years later on, left Brussels, where he represented his Government, and went to Paris and London in order to arrange for a concession to Prince Louis Napoléon Bonaparte, then a prisoner in Ham.

It is apparent that none of these schemes was ever supported by any powerful agency, or with steadiness
enough to be carried through. There was always a doubt about the possibility of the work, or a doubt that it might never be possible to obtain money enough to push it to a successful conclusion. On the other hand, advantageous as it was evident the canal would be to the whole world, the shipping trade that would seek it did not appear to be extensive enough to remunerate the capital that would be required. But at last the world found a powerful incentive to give close attention to the commercial and political importance of the canal. The acquisition of California by the United States, and the discovery of gold in its territory, marks a new era in the history of the attempts to make serious studies of the isthmus with a view to establishing a continuous water communication between the two oceans. The problem, too, now became one of actual live political interest to the Americans, and the period between 1848 and 1861 was full of interest to them on account of the political discussion with Great Britain as to the preponderating influence in Central America and the occupation of the isthmus by either Government. But as we shall have to deal with these political questions in separate chapters, we will for the present content ourselves with showing the several efforts to survey and build a canal as an industrial enterprise.

While that problem was not settled, the Americans, anxious for means of communication, if not by water, then by an overland route, obtained from New Grenada a concession for a railway; and for that purpose they formed a company in 1849, and entrusted the surveys to Colonel Hughes and to J. C. Trautwine. The United States Government soon after sent General Barnard, of the corps of Engineers, to survey the Isthmus of Tehuantepec, also with a view to building a railway. Barnard found the route impracticable, while Hughes and Trautwine
succeeded much better in Panama, and designed a road of the total length of 47½ miles, of which about half was to be level. The road was built between 1850 and 1855 by the engineers Totten and Trautwine.

In the meantime the idea of a canal was not to be given up. The United States Minister in Nicaragua, Elijah Hise, concluded at the same time (1849) with that Government a treaty for establishing "a passage and communication between the Caribbean Sea and the Pacific Ocean, to facilitate the commerce between the two oceans, and to produce other great results." Owing to its several provisions of a political nature, the authorities at Washington did not approve that scheme, known thenceforth as the "Hise-Selva convention." But the country received the arrangement with every mark of approval, and a company was at once organized by Cornelius Vanderbilt, Joseph L. White, and others, under the style of "American, Atlantic, and Pacific Ship Canal Company," which obtained from Nicaragua the right to build the proposed canal. That was, we repeat, in 1849, when the English were trying hard to get a firm hold on what was supposed to be the future termini of the canal, while the Americans were protesting against that occupation, and had themselves repudiated the treaty concluded by their Minister in Honduras, Squier, for the cession by the latter country to the United States of the Tigre Island, in the Fonseca Bay. It was from these conflicting interests that the Clayton-Bulwer treaty of 1850 originated.

However, the "American, Atlantic, and Pacific" was organized by strong men, who proposed to survey the route thoroughly, and then appeal for money, both in America and England. On March 9, 1850, Norberto Ramirez, "supreme director" of Nicaragua, confirmed the company's grant, and the company commissioned
Colonel O. W. Childs to make the necessary studies. He made reconnaissances of several of the proposed routes, and after a careful work, in which he was aided by J. D. Fay and S. H. Sweet, he came to the conclusion that "the line leading from the mouth of the Rio Lajas to the Pacific, at Brito, presented more favourable conditions for the construction of a canal than any other." His survey is said to have been the first in the isthmus that conformed itself to the requirements of true engineering. Child's report was submitted to Colonels Turnbull and Abert, of the United States Topographical Engineers, who confirmed its accuracy, and then, at the request of the United States Government, it was revised by two English authorities, Col. Aldrich, of the Royal Engineers, and Mr. James Walker; C.E., who, on July 16, 1852, confirmed its conclusions.

The "Atlantic and Pacific" Company, however, did not succeed in raising the money. Walker's expedition to Nicaragua, fomented mainly by the slave power, but emphatically disowned by the Washington authorities, caused the Nicaraguan Government to become very suspicious of the United States, and in 1856 the company's grant was declared null and void. Thanks, however, to the ability of the Secretary of State, Lewis Cass, a convention, known as the "Cass-Yrisarri convention," was negotiated in Washington on November 16, 1857, making mutual arrangements with respect to a communication from ocean to ocean through Nicaragua.

Let us now see what was going on in other parts of the isthmus in the fourteen years between 1850 and 1864.

A rich New York merchant, Mr. Frederick M. Kelley, impressed with the belief that Humboldt must have been
right as regards the feasibility of a canal through Darien, sent in 1851 J. C. Trautwine, a prominent civil engineer, who had been associated with Col. Childs, and until his death was more or less connected with the isthmus explorations, to make a reconnaissance of the headwaters of the Atrato, of the Gulf of Darien, and of the mythical Raspadura Canal, through which the Indians were said to cross from ocean to ocean. Although the result of this expedition was by no means encouraging, Mr. Kelley organized two others in 1853 to go over the same ground, which, however, did not discover anything that had not already been brought forward by Trautwine.

Mr. Kelley then tried the head-waters of the Atrato, and thence in the direction of the Truando, sending out two parties, in 1853 and 1854, the latter under Captain Kennish. Later on he came to Europe to submit his plans, surveys, &c., to the English and French savants, and he was everywhere received with the greatest marks of regard.

On his return to America, having been unable to accomplish anything in Europe, President Buchanan, who while Minister in England had taken an interest in Mr. Kelley's enthusiastic labours, procured the passage by Congress of a Bill authorizing the President to appoint army and naval officers to verify the survey already made for a ship-canal. Agreeably to the Act of the Legislature, the President appointed Lieutenant N. Michler, of the army, and Lieutenant T. A. Craven, of the navy, to verify the survey of Captain Kennish. Those officers made separate reports. Michler was of opinion that the construction of a canal presented many difficulties, that the cost was incalculable, and that the effects of a deadly climate on the labourers must be taken into account. But he thought that the scheme was possible, especially
if Kennish's route were abandoned, and another one, which he now proposed, were taken up instead—viz., that which follows up the course of the Truando, except when this river bends to the north, when the route ought to follow a straight line to the Atrato, 22 miles above the village of Sucio. The route would then strike the range of mountains, which it would cross by means of a tunnel 12,250 feet in length, following down in the Pacific slope the course of the Paracuchichi. Michler estimated the cost of this canal—75 miles long, including the tunnel, 100 feet high above water—to be $1,35,000,000, or £27,000,000, which was twice as much as had been estimated in America, according to the data of Kennish himself. Mr. Kennish was not satisfied that it would be safe to persist in that Truando-Atrato route, at least for the moment.

That public-spirited American then turned his attention to the possibility of a sea-level canal, even if a great tunnel became necessary. He first asked General Totten, of the Panama Railway, to let him have his views as to that route being available. Totten reported that the Chagres river could not be controlled, and would break up the canal, and, besides, ten or twelve locks would have to be made. Mr. Kelley directed his efforts to the San Blas route, in that part of the isthmus which is the narrowest, between the Gulf of San Blas, on the Atlantic, and the mouth of the Bagano, on the Pacific. Two expeditions were sent out, composed of Rude, Sweet, McDougal, and others, in 1863 and 1864, and they were nearly successful, but could not finish their labours on account of the interference of the Indians. Altogether Mr. Kelley had spent from his private resources about £25,000 in this laudable purpose. Everywhere in the world where there was a congress of gentlemen to confer
about the several routes it would seem that Frederick M. Kelley, of New York, should have been listened to, if not with admiration and affection, at least with respect. And yet at the Paris "International Scientific Congress" of 1879, when an American delegate asked the committee on the selection of a route to give a hearing to the project of Mr. Kelley, from San Blas to Panama by the Bayano river, which was seconded by Sir John Stokes, who added that what was known of that route justified a hope that the project might deal advantageously with some of the difficulties, there was a great deal of opposition to the proposal to hear Mr. Kelley. M. Simonin, known for his extremely superficial and not altogether reliable articles on the United States in *La France* and *Revue des Deux Mondes*, exclaimed—"We are not here to register these schemes. Do they propose that we shall set about and examine everything that the Americans have been doing for the last ten years? We should lose our time. We have to discuss only the projects of MM. Wyse and Reclus, Blanchet and Menocal, and others." M. Simonin might as well have eliminated the two latter names. He and his friends did not want to hear but of the Wyse-Reclus project, and in their cynical effrontery they even snubbed a man like Kelley!

Leaving now the Darien aside, let us see what was going on in the isthmus in these same fourteen years, from 1850 to 1864, apart from the work in Nicaragua and the labours of Mr. Kelley.

Dr. Edward Cullen, a Dublin physician, interested himself very much in the project of a ship-canal between the Gulf of San Miguel and Caledonia Bay; and in 1852, after calling Lord Palmerston’s attention to his scheme, he interested in it the contractors Fox, Henderson, and Brassey, of London, and obtained for them and himself
a concession from Columbia for such a canal. The contractors dispatched Lionel Gisborne, C.E., to make an exploration. He reported favourably, but his report is full of errors, due to the superficial character of his examination, the result of which is published in his book, "The Isthmus of Darien in 1852." At any rate, his endorsement of the Caledonia route attracted wide interest in the subject, and in the United States, President Pierce in 1853 authorised the Secretary of the Navy to commission Lieutenant Isaac C. Strain, who was not a new explorer of Central and South America, to go over the proposed route and report upon its feasibility for a "ship-canal on the grandest scale," also "avoiding all infractions of international law." Lieutenant Strain reached Caledonia Bay from United States in January 1854, and, with twenty-seven men, started for the interior of Darien. This expedition became one of the most important in the history of the isthmus. British capital was ready to be invested in the Cullen scheme, but Strain was to give the last word. He soon discovered that Gisborne's report was altogether unreliable. Strain was confronted by mountains 3,500 feet in height instead of only 150 feet. His party could not help taking different routes, climbing steep hills and meeting roaring rivers. Strain himself was lost sight of, and searching parties were organized, one of them by Gisborne himself. The history of the terrible privations and sufferings undergone by Strain and some of his men, from hunger and thirst, and the enforced abandonment of one of their companions, who though still alive was too weak to follow them, and the death of others, is one of the most stirring narratives in the annals of the difficult explorations of the world. When Strain was found he said that its failure was in itself a great success, for it gave a death-blow to the
Cullen scheme, thereby preventing great sacrifice of life and money.

In 1856, as we have already said, Nicaragua annulled the concession to the "Atlantic and Pacific," and a year afterwards the United States Government ordered the Michler and Craven surveys in the Darien. Except Mr. Kelley's expeditions, nothing was undertaken by the United States Government or its citizens from 1857 until 1869. In 1857 the political agitation in the United States was already assuming the most serious character, which revealed itself in the breaking out of the civil war a few years later on; and even after the conclusion of the internecine strife the public mind was too much preoccupied with the reorganization of the Union, with 4,500,000 newly made citizens, to give any attention to the subject of interoceanic communication. During the war the necessity for it became apparent, and the Pacific Railway Bills were carried, but beyond that nothing was done, and, considering the position assumed towards Congress by Andrew Johnson, who substituted the murdered President Lincoln, nothing could have been done by the Government at that time. In 1860 Daniel Ammen, then lieutenant in the U.S. Navy, impressed by the result of Strain's reconnaissance, addressed a communication to the New York Geographical Society, suggesting to it to send out an expedition, and giving in detail the task that should be entrusted to it. After the war, Daniel Ammen, who had been promoted to the rank of captain, had frequent occasions to discuss the matter with prominent officers of the Government, and he interested General Grant very much respecting the necessity for further surveys. We shall hereafter show how Captain Ammen's labours opened up a new era in the history of explorations on the isthmus.
FIRST EXPLORATIONS.

Up to the end of the civil war the only semblance of a regular survey in the isthmus made by a Frenchman was that of Garella, already referred to. In 1861 M. de Puydt examined the Tuyra (Darien) and several of its tributaries, and in 1864 he returned to make a reconnaissance of the Gulf of Darien by the Tanela River. His data are, however, altogether unreliable.

In 1865 Señor Gogorza discovered some old maps, and induced some capitalists in Paris to fit out an expedition, under M. Lacharme, to study a passage by the River Panusa, a confluent of the Tuyra; while in the field Lacharme abandoned the proposed route and followed the course of the Paya up to the watershed, and then that of the Cacarica to the Atrato, whence he came back, satisfied at the possibility of a canal, 50 miles long with the summit, near the village of Paya, only 190 feet above the sea-level.

Beyond that nothing else was ever done in the isthmus by Frenchmen until the Wyse-Reclus expeditions, which we shall discuss separately hereafter; but as they were preceded by the several United States explorations, we shall first have to give an account of the interest of the United States in this matter.
CHAPTER II.

INTEREST SHOWN BY THE UNITED STATES GOVERNMENT IN A CANAL.

Systematic explorations of the isthmus under the Government of the United States.—Tehuantepc, Nicaragua, Panama, San Blas, Caledonia Bay, Atrato, Napipi, thoroughly examined.—A commission of revision decides for Nicaragua.—Short description of the route.—Interest that the Government has always shown in the building of a canal under its own auspices.—Secretary Livingston in 1831 protests against a Dutch company building it.—Report of Mercer in 1839.—The Treaty of 1846 with New Granada, now U.S. of Colombia.—Minister Hise treats with Nicaragua for the building of a canal by the United States.—President Pierce in 1856 proposes a direct control over Panama.—Secretary Cass negotiates another treaty with Nicaragua in 1867.—A fresh treaty is negotiated with her in 1881, and still another in 1884.—A treaty is concluded with Colombia in 1869, and another in 1870, neither of which is ratified.

The explorations in the isthmus under the auspices of the American Union are the only thorough studies that up to 1880 had ever been made, and they deserve special treatment. At the same time, we shall attempt to show the deep interest evinced by the Government of the United States in the building of a canal, excluding for the present the merely political aspect of the question, which deserves the more detailed consideration which we have further on devoted to it.

What was done in the way of American exploration in the isthmus before 1870 has already been succinctly reviewed in the previous chapter, when we referred to the
expeditions and work of Kelley, Trautwine, Totten, Michler, Craven, and Strain. We have shown that it was only in 1868 that Admiral Ammen (then captain) impressed upon his friend General Grant the importance of a series of methodical surveys under the Government. General Grant, without any loss of time, requested the Secretary of State, Mr. Seward, to put himself in communication with the Colombian Government, with a view to obtaining authority for further surveys in its territory. At the same time, Congress passed a resolution, introduced by the Californian senator, J. Conners, directing the Secretary of the Navy to furnish a report on the subject. In response to this demand, Rear-Admiral C. H. Davis reported in July 1866, "there does not exist in the libraries of the world the means of determining, even approximately, the most practicable route for a ship-canal across the isthmus." Nothing further was done in the matter until General Grant was elected President, and called Admiral Ammen to Washington, and placed him at the head of the Bureau of Navigation. Congress had voted the money for the surveys, and a commission was appointed in 1872 to report upon the several results of the different expeditions that had already been, or were to be, sent out at the expense of the Government. The following is a list of the canal lines, and of the work done upon them by the American naval officers:—

I. Captain R. W. Shufeldt made an instrumental reconnaissance of the Isthmus of Tehuantepec in 1872.

II. Commander Chester Hatfield in 1872, and Commander E. P. Lull in 1872 and 1873, made an examination, survey, and definite instrumental location of an interoceanic canal from the vicinity of Greytown or
San Juan del Nicaragua via Lake Nicaragua and thence via the Rio del Medio and Rio Grande to Brito.

III. Commander E. P. Lull made an examination, survey, and definite instrumental location for a canal from Navy Bay to Panama in 1875.

IV. Commander T. O. Selfridge in 1870 examined and surveyed a route from the Gulf of San Blas towards the River Chepo; and Commander E. P. Lull in 1875 made further reconnaissances from the waters of the Chepo towards the Gulf of San Blas.

V. Commander T. O. Selfridge in 1871 drew several tentative lines from Caledonia Bay to the waters of the Sucubti and Morti, which are tributaries to the Chucunaque.

VI. Commander Selfridge examined the Du Puydt line between Tuyra and Atrato via the Tanela river.

VII. Commander Selfridge examined the Gogorza route, via Atrato-Cacarica Tuyra and Cué rivers, in 1871.

VIII. Lieutenant Frederick Collins in 1875 examined and located a route by way of the Napipi and Doguado rivers.

Besides the above there was—

IX. An inspection of the Nicaragua and Atrato routes, made in 1874 at the request of the Secretary of the Navy, by Major W. McFarland, Captain W. H. Heuer, both of U.S. Corps of Engineers; Prof. H. Mitchell, U.S. Coast Survey, General Jacob Ammen, and Mr. D. S. Walton, C.E.

The different reports of these expeditions, covering a period of five years, are to be found in several thick volumes. The report of Commander Shufeldt on Tehuantepec is printed as Senate Executive Doc. No. 6, 428 Congress, 2nd session.
The report upon the survey of Darien by Commander Selfridge was published in 1874 by the Navy Department.

The results of the Hatfield and Lull explorations were printed as Senate Executive Doc. No. 57, 43rd Congress, 1st session.

The reports of explorations and surveys for the location of canals through the Isthmus of Panama, or by the valley of the Nipipi River, by Commanders E. P. Lull and F. Collins, were published conjointly in Washington in 1875.

Finally, the reports of Major McFarland, General Ammen, and Professor Mitchell, of the commission of re-inspection of 1874, were sent to the Senate by President Hayes in April 1879; but, with the exception of that of Professor Mitchell, which will be found in the annual report of the Coast Survey for 1874, appendix 12, they have not been printed in full.

All these reports are exhaustively reviewed by Admiral Ammen in his most important work entitled "The American Interoceanic Ship-canal Question," 1880; and also by Lieutenant J. T. Sullivan in his "Problem of Interoceanic Communication," published by order of the Bureau of Navigation, Washington, 1883, to both of which works we are much indebted.

It is beyond our scope to give more than a short notice of these different explorations. Nothing was wanting to make them as thorough as possible under the many difficulties that present themselves at the isthmus. The naval officers were aided by able scientific assistants; and the supply of instruments for astronomical, topographical, and hydrographical work was as complete as money could make it.

Between 1870 and 1875 Commander Selfridge ex-
amined all the routes in the Darien, except the Truando and the Atrato-San Juan. His plan was to make, "first, a barometric reconnaissance; and afterwards, if the result justified it, to run a level and transit line so as to develop a correct profile." If the profile appeared favourable, then a level and transit survey for actual location was to be made. The Napipi line was the only one of which he made surveys for actual location, all the other lines having been found unfeasible.

The hardships of these expeditions were terrible. The men had to carry their own apparel, food, and necessary implements. Every inch of their route was traversed at the expense of great labour. They had to wear wet clothes the whole day long; they had to maintain a regular battle with snakes and insects, and, what was worse, with fever.

Among the routes, Commander Selfridge studied the Cullen route, which he thought to be thoroughly impracticable; he found elevations of 1,000 and 1,500 feet where Cullen had spoken of but 200. He also examined some of the lines of Kelley's engineers, with whom he could not fully agree. From their combined surveys it would appear that a canal through the Mandinga-Mamoni-Bayano would have a minimum length of 33'25 miles, 10'68 miles of which would require tunnelling. By another route, the Nercalagua-Namoni-Bayano, a canal would be but 30'97 miles in length, but the length of tunnel required would be 9'37 miles. By still a third route, the Carti-Mamoni-Bayano, the length would be 31'34 miles, and the tunnel only 8'05.

In 1871 Commander Selfridge planned a thorough exploration of the Atrato-Cacarica-Tuyra-Cué line, the Atlantic division being under the command of Lull, who had then been promoted to commander, but volunteered
to remain under Shufeldt. These explorations lasted six months, including three months of the rainy season. The harbours for this route are excellent, but the line was found to be utterly impracticable. From the mouth of Cacarica, on the Atrato River (which debouches on the Gulf of Darien), to the Tuyra River, a little below the mouth of its tributary the Chucunaqua, the canal would have been 55 miles long, and would have cost $250,000,000, or £50,000,000. The studies disposed of the Gogorza-Lacharme lines, as well as that of Du Puydt, whose data were found to be most incorrect.

The Atrato River runs northwards towards the Gulf of Darien, on the Atlantic, and parallel to the coast line of the Pacific, from which it is distant 25 to 50 miles. Commander Selfridge next tried to find a communication suitable for the purposes of a canal between the Atrato and the Pacific. After examining the valleys of the Tacundo, Cuya, and Bojaya, he ascended the Doguado to the Napipi, and found that that was so far the best line. From the Atrato to the Bay of Chiri-Chiri the distance is but 28 miles, and a lock-canal by this route would cost, Commander Selfridge thought, but $61,000,000, or £12,200,000. In 1875, however, Lieutenant Frederick Collins developed this line at Selfridge's request, and found that, although a canal would be entirely feasible, its minimum length would be 30 miles, while it would cost $98,000,000, or £19,600,000, and would require a tunnel 3½ miles long.

The Panama line was studied in 1875 by Commander Lull, who at the request of the Interocéanic Canal Commission, under General Humphreys, followed a route in close proximity to the Panama Railway line. Commander Lull was assisted by U.S. Engineer Menocal, who had been surveying the Nicaragua line. A through cut
THE PANAMA CANAL.

from tide-water to tide-water was deemed impracticable, and the line was drawn for a lock-canal, which was thought possible at a cost of nearly $100,000,000, or £20,000,000. The length of this line would be 41.7 miles from sea to sea; the summit level was placed at 123.75 feet, to be overcome by the use of twenty-four locks, with a lift of 10.3 feet each, in addition to which a tide-lock was to be placed at the Panama terminus. The route would, moreover, necessitate a viaduct sufficiently elevated above the floods of the Chagres River to permit the floods to pass under it. Such a viaduct would be 1,900 feet long, and 44 feet above the Chagres bed. For the supply of water to the summit it was proposed to dam the Chagres, so as to raise its waters 36 feet above their ordinary level, and then conduct them by seven tunnels, 13,700 feet in length, and two aqueducts, altogether measuring more than 10 miles.

The Nicaragua route, which was already quite well known, thanks to the explorations of Col. Childs, and also to the fact that it lies on a much-frequented road, the advantages and disadvantages of which are equally apparent, was explored by Commander Hatfield in 1872, and by Lull and Menocal in 1872-3, and Menocal in 1880. The expedition of Commander Chester Hatfield did not go far enough to give definite results, but it made frequent reconnaissances. A better line than Childs' one of the Rio Grande was drawn, commencing at the Rio del Medio to Buena Vista, thence to the valley of the Chacalapa. The heavy rains obliged the party to stop all work after ten weeks, except the survey of the lake, which continued throughout the season.

In December 1873 Commander Lull assumed the direction of another expedition. After laborious studies
he drew up nine different lines, all of which deserve attention, from Nicaragua Lake to the Pacific. One by one he put all aside except two—those by way of the Lajas and of the Rio del Medio, which routes conjoin about half-way.

In 1880 Mr. A. G. Menocal, U.S.N., once more examined this route, and made extensive surveys, proposing a canal with the following dimensions:—Width at bottom, 72 feet; at the surface, 106, 128, and 165; 26 feet deep; length of locks, 600 feet; width, 70. The line to have eleven locks, six on the Pacific and five on the Atlantic slope. The length of the route to be 173.57 miles, of which there were to be—64 miles of river navigation; 56 miles of lake navigation; 53\frac{1}{2} miles of canal navigation. The canal proper would be, therefore, less than one-third of the total length.

Mr. Menocal estimated such a canal to cost, without contingent expenses or interest on dormant capital, $41,193,839, or £8,382,000.

Such, briefly stated, were the systematic explorations which had been undertaken by the United States Government with the view of solving the problem of the best route for a canal. From amongst them the Government selected those which had an appearance of practicability, and despatched commissions to report upon them.

The commission appointed by General Grant to report upon the various plans consisted of General A. A. Humphreys, chief of the U.S. corps of Engineers, Mr. C. P. Patterson, superintendent of the Coast Survey; and Commodore (now Admiral) Daniel Ammen, chief of the Bureau of Navigation. On February 6, 1876, the committee (which had been appointed in 1872 and
was following up the developments of the explorations), gave its decision in a careful report, according to which they, "after a long, careful, and minute study of the several surveys of the various routes across the continent, unanimously report—(1) That the route known as the Nicaragua route . . . . possesses, both for construction and maintenance of a canal, greater advantages, and offers fewer difficulties, from engineering, commercial or economical points of view, than any one of the other routes shown to be practicable by surveys sufficiently in detail to enable a judgment to be formed of their relative merits, as will be briefly presented in the appended memorandum."

Such was the judgment of competent men, specially fitted to form an intelligent opinion on the subject. Our readers will soon learn how such decision was to be overruled by an inexperienced French naval officer after a few days' run over the Panama Railway line.

It now remains to show that the interest of the United States in the isthmus, apart from political considerations, has been manifested not only through these costly and systematic surveys, but also in several attempts made by that Government to control the building of the canal itself; and nothing else could have been expected from a nation physically and politically situated with respect to the proposed canal as the Great Republic is.

We have already referred to the efforts made by Nicaragua to have a canal built by the United States in 1825–6. Mr. Henry Clay, the Secretary of State, wanted first to have an investigation made as to the practicability of a route, before consulting Congress; and although Secretary Clay appointed a new Minister to Central
America with the object of making such an investigation, it does not appear that he ever did anything to carry out the object of his mission.

We have also alluded to the undertaking in 1830 of William, King of the Netherlands, to have a canal built in Nicaragua by a company of Dutch subjects, whose charter had been obtained through the influence of the Minister for Holland in Guatemala. This grant attracted a great deal of attention in the United States, and the Government at Washington took immediate steps to counteract it. The Secretary of State, Mr. Livingstone, in July 1831, instructed the American Minister in the Netherlands to represent to the Dutch Government that the United States, as the most interested party in the canal, ought to enjoy all advantages that would be conceded to any other nation. This was important, inasmuch as the grant gave the Dutch a monopoly of the coastwise trade in Central America. Mr. Livingstone also said that if the grant were not completed the Minister should endeavour to secure for American citizens, or for the Government of the United States, the right of subscribing for the stock.

Now, the significance of such instructions is very striking when we reflect on the political situation in the United States at that time. Jackson was President, and since 1829 he had been opposed to the policy of internal movements being carried on by federal power and money, on the ground that it was against the strict interpretation of the constitution. In 1830—but a few months before Mr. Livingstone was drafting the instructions above referred to—Jackson was vetoing the celebrated Turnpike Road Bill in Kentucky, authorizing the Government to subscribe for it. The President was also attacking the National Bank, vetoing the National Im-
provements Bill, and taking other measures which did not savour at all of centralization. Yet this matter of a canal in the American isthmus, under the control of a European king, was deemed by him as too important to be consigned to his policy of *laisser faire*, and he took energetic steps to lay the corner-stone of the true American policy on this canal matter.

It has already been shown that Jackson in 1835, and therefore after his re-election, appointed Biddle to go and study the subject of interoceanic communications, and that Biddle obtained *for himself* a concession from New Grenada, which his Government disallowed.

In 1839 the chairman of the Committee on Roads and Canals of the House of Representatives (Mr. C. F. Mercer) presented a voluminous report on this subject of interoceanic communication, concluding with the recommendation that the House should adopt a resolution to the effect that the President be requested to consider the expediency of opening negotiations for the protection of a canal, and for securing equal rights to all nations on the payment of reasonable tolls. It is evident that the attempt of the Dutch to get the monopoly of the coastwise trade was the cause which led to this step.

In 1846 the United States concluded with New Grenada, now the United States of Colombia, the treaty of December 12, ratified on June 10, 1848, which is still in force. In fact, it is in virtue thereof that a naval force of the United States has lately occupied Aspinwall and Panama. The treaty was to remain in force for twenty years, and then if neither party should give notice of its intended termination, it was to continue in force for twelve months after such notice. It was the first time that the United States had by treaty assumed rights and obligations regarding a canal through
the isthmus. Art. XXXV. stipulates that American citizens, vessels, and merchandise shall enjoy in New Grenada all immunities and privileges enjoyed at any time by Grenadian citizens, such privileges to be extended to passengers, correspondence, and merchandise in their transit across the territory from one sea to the other. "The Government of New Grenada guarantees to the Government of the United States that the right of way or transit across the Isthmus of Panama, upon any system of communication that now exist or that may be hereafter constructed, shall be open and free to the Government and citizens of the United States, and for transportation of any articles" of merchandise of lawful commerce. "And in order to secure to themselves the tranquil and constant enjoyment of these advantages, and as an especial compensation for the said advantages, and for the favours which they have acquired by Arts. IV., V., and VI. of this treaty, the United States guarantee positively and efficaciously to New Grenada, by the present stipulation, the perfect neutrality of the before-named isthmus, with the view that the free transit from one to the other sea may not be interrupted or embarrassed in any future time while this treaty exists; and in consequence the United States also guarantee, in the same manner, the rights of sovereignty on property which New Grenada has and possesses over the said territory."

This treaty is of great importance in the study of the political difficulties of this subject of a ship-canal, and we shall have occasion to revert to it. For the moment we will note that for the first and indeed the only time in its history the United States in this case went so far as to guarantee the indivisibility of the territory of a foreign country, in exchange for the free transit of citizens and
merchandise through that territory. When it is remembered that the United States Government has always adhered to the policy of non-interference in affairs of other countries the far-reaching effect of such a treaty as that of 1846-48 becomes evident. The ratification of the treaty was made only four months after the large increase of territory gained by the United States from Mexico. That matter of the canal, always important to the Americans, then became of the greatest consequence to them.

We have shown what private enterprise was trying to do in Nicaragua and elsewhere in the isthmus, and also how the British authorities tried to obtain control of the terminus of the line, supposed already at that time to be the most suitable one for a canal—that of Nicaragua. In June 1849 Mr. Elijah Hise, American Minister in Nicaragua, negotiated with its Government a treaty (the Hise-Selva convention) granting to the United States the exclusive right and privilege to make a canal through the territory of Nicaragua. The American Government might entrust the work to a company. The land and the materials with which to build the canal were to be provided by Nicaragua. The Government or the company was to have the exclusive privilege of conveying passengers and goods. War vessels or other vessels belonging to the Governments of the contracting parties, and transporting troops, munitions of war, and public property, were to have unrestricted use of the canal free of all costs. Art. VI. provides that public armed vessels, letters of marque, privateers, and private merchant and trading vessels, belonging to countries with which the contracting parties might be at war, should not during the war be suffered to come to the termini of or to enter the canal, nor should the use of the canal be permitted to
neutral vessels carrying contraband of war for or from the enemy of either party. It is furthermore provided in another article that Nicaragua was not to levy any duties or taxes except on goods brought in through the canal, which would be left in Nicaragua for consumption. Article X. grants to the United States, or to the company that might be formed, three square miles at each end of the canal to form free municipalities under the qualified dominion and government of Nicaragua. Art. XI. stipulated that the United States should enjoy, among others, the right to send officers, troops, and munitions of war at all times through the Nicaraguan territory. By Art. XII. the United States agree to protect and defend Nicaragua in the possession and exercise of the sovereignty within the true limits of her boundaries, the United States to employ military and naval force, if necessary, to maintain that obligation, should Nicaragua become involved in war within her own territory.

Although it is claimed that this treaty was negotiated without any knowledge or power from the President of the United States, his Secretary of State, Mr. J. M. Clayton, declared that he would not hesitate to submit it to the Senate for approval if the British Government persisted in holding, as it did, the port of San Juan. The Clayton-Bulwer treaty was concluded in the following year, and the Hise treaty was not ratified. The Government of that time was very glad to avoid a collision with Great Britain upon the Mosquito question pending between her and Nicaragua. The Hise convention went indeed further than the United States Government wanted to go.

In 1856 President Franklin Pierce sent a mission to the United States of Colombia to negotiate a treaty for the better protection of the transit of the isthmus. In
view of the riot at Panama in April of that year, which the Colombian authorities could not or were not willing to restrain, the United States proposed the creation of a belt of territory along the Panama Railway, ten miles on each side of it, the government of which was to be in the hands of two municipalities, the United States acquiring the possession of some islands in the harbours at each terminus, where the Government could maintain naval stations. In the instructions to the special commissioners, Mr. Marcy, the Secretary of State, says that they should ask for the transfer to the United States of the Colombian reserved rights in the charter of the Panama Railway. They were told that Colombia had failed to take effective measures to guard against the recurrence of riots. The Government of Colombia was to be offered a liberal compensation in cash for the island of Taborga, and those of Ilenao, Flamingo, Perico, and Culebra, all in the harbour of Panama.

This proposal was not acceptable to the Colombian authorities, and was not pressed.

In the following year, while Nicaragua revived the American, Atlantic, and Pacific concession to which we referred in a previous chapter, the Secretary of State, Mr. Lewis Cass, negotiated in Washington with the Nicaraguan envoy, Mr. A. J. de Yrisarri, a treaty of commerce and navigation by which Nicaragua grants to the United States and their citizens the right of transit through the territory, or any route or line of communication, by land or water, natural or artificial. The United States guarantee the neutrality of such route, and agree to employ their influence with other nations to the same effect. It is also provided that there will be free ports, &c. The treaty had only a political bearing, as Nicaragua revived to an American
company a charter which gave it all rights which would otherwise have been reserved. It was unnecessary for the Government at Washington to claim any monopoly when that charter had secured all that was requisite to an effective preponderance of the United States on the canal.

In 1864, Honduras having granted a concession to an "International Railway Company," the United States Government concluded with that republic a treaty, dated July 4, in which the right of way and other favours were conceded to the United States, and in compensation that Government guaranteed "positively and efficaciously the entire neutrality of the same" sovereignty of Honduras over the line of the railway. "And when the proposed road shall have been completed, the United States equally engage, in conjunction with Honduras, to protect the same from interruption, seizure," or unjust confiscation. Nevertheless, in according its protection to the said route, the United States were free to withdraw it if any unfair discrimination should be made by the railway authorities in favour of any other nation.

In 1867 a new treaty was made with Nicaragua, containing precisely the same provisions as in the Honduras treaty regarding the interoceanic communication. That was the Dickinson-Ayon treaty.

Nicaragua again in 1877 opened negotiations in Washington through a special envoy, Sr. Cardenas, to facilitate the work of a canal across her territory. The Secretary of State, Mr. Hamilton Fish, proposed the draft of a convention, the preamble of which stated that the treaty of June 21, 1867, contains several stipulations regarding a canal which it was now deemed "indispensable" to change in some respects and extend in others, in order to
facilitate new efforts for the commencement and completion of the work.

The Nicaraguan envoy proposed many alterations which were wholly inadmissible by the United States. The draft of the treaty was published afterwards, and bears testimony to the moderation of the Washington Government. If Nicaragua had not been so short-sighted the convention would have been concluded and the canal begun.

In the meantime the United States Executive had also concluded with Colombia a treaty which is of the greatest importance to our subject. In 1866 Admiral Ammen had proposed a systematic survey of the isthmus, and Mr. Seward was authorized in the following year to approach the authorities at Bogota in order to arrange for permission for the surveys on the Darien and Panama sides of the isthmus, and also to regulate the whole matter of interoceanic communication. Such importance was attached to this negotiation that Caleb Cushing, the great lawyer, who had been Attorney-General of the United States during two administrations, was sent to Bogota to aid the Minister-Resident in procuring a good treaty. After a prolonged exchange of views, the treaty was concluded at Bogota on January 14, 1869, and was sent to the United States Senate on the following February 15, in the last days of the Johnson administration.

This treaty, which was at the time sent to the Senate in a confidential manner, was published only a few years ago, and is not generally known in Europe. We will therefore make a few extracts from it.

The first articles provide for the surveys and location of the canal, Colombia appropriating lands as required by the plans, and besides that ten miles of unsettled lands on each side of the canal throughout its entire length,
lands to be measured into equal lots, each lot having no greater frontage on the canal than 3,300 yards, the lots to be equally distributed between the two Governments, the United States to have the first selection. Colombia is not to allow any other canal. The canal to be constructed by the United States, which may maintain a military force during construction, not to exceed 1,000 men, except through consent of Colombia. The control and government of the canal is invested in the United States, Colombia being, however, at liberty to maintain a committee of agents for inspection of books and accounts, but not to interfere with the working of the canal.

Art. VII. provides for the tolls to be fixed by the United States on a basis "of perfect equality for all nations, whether in time of peace or war." . . . . "Twelve years after the canal be brought into operation the Government of Colombia shall be entitled to an annual 10 per cent. of the net proceeds of the undertaking," that proportion to be increased to 25 per cent. as soon as the United States shall have been reimbursed for the capital invested in it; it being, moreover, stipulated that the annual expenses shall in no case exceed 30 per cent. of its annual receipts.

Art. VIII. retains for Colombia the "political sovereignty and jurisdiction over the canal and territory appertaining thereto;" but Colombia "shall not only allow but guarantee to the United States of America . . . . the peaceable enjoyment, control, direction, and management of the same."

Art. IX. provides that in time of peace the United States shall have the right to use the canal for troops, munitions of war, &c. Troops, vessels, and munitions of nations at war with another or others shall be "rigorously" prohibited from entering the canal.
By Art. XIII, the United States reserve to themselves the right to transfer their franchises and obligations to any individual or association of citizens; all differences between such individuals and Colombia to be decided by a court of arbitration in Bogota. It is furthermore provided that "the political obligations herein assumed by the United States of America and the United States of Colombia are permanent and indefeasible." Any differences between Colombia and the United States to be decided by arbitration of some impartial Government.

This treaty was not ratified by the United States Senate, having been found inadequate in some respects.

When General Grant assumed the presidency of the United States he sent to Bogota as Minister-Resident Mr. S. A. Hurlbut with the mission of negotiating a new treaty. The document was signed by him and by Señors Arosemena and Sanchez as plenipotentiaries of Colombia, on January 26, 1870, and in the following March was submitted to the American Senate. On the other hand, it was submitted to the Colombian Legislature later on in the year, and subjected to so many amendments that it became unacceptable to the United States. The treaty retains the general features of the Cushing-Sullivan one, but it makes two or three essential changes, referring to the neutrality of the canal, the mode of collecting the dues, &c. The Colombia Legislature desired that neither country should exercise the belligerent right, in case of either having war with another nation, of excluding from the canal, capturing, or blockading the merchant vessels of the enemy. This, however, was meant to apply only to the vessels of those nations which by treaty should guarantee the sovereignty of Colombia over the isthmus, and provided that neither of such nations should commit acts of hostility within the canal or its dependencies.
Although the treaty was unacceptable, the surveys went on, as we have already shown. Since 1877, when the Nicaragua negotiations through Sr. Cardeñas miscarried, nothing was done by the United States to obtain a concession until 1884, when President Arthur submitted to the Senate a new treaty. In the meantime, General Türr, M. Bonaparte Wyse, and M. de Lesseps carried on the negotiations that resulted in the Wyse concession, of which we shall hereafter speak at length when we come to touch upon the political question.

From what has been said in this chapter of our story of M. de Lesseps, it is very clear that the United States Government, aside from any desire to exclude European nations from securing a foothold on the isthmus, has always shown a deep interest in this canal matter. England thwarted for a long time the Suez Canal enterprise, on the ground (and a very good ground too) that it would be the roadway to her possessions in India, which she did not want to see in the hands of any other Power. And yet in the isthmus of Central America the United States have a highway, not for their colonies, but for their own territory, for part of their own country, for States larger than France, and capable of maintaining 50,000,000 of people.

Now, we may pertinently ask if any one does really believe that the United States, growing stronger every day, are going to submit quietly to the establishment of the French in the Isthmus of Panama? Is it possible that their anxious interest in the interoceanic communication will suddenly cease after so many years of strenuous efforts? Has the necessity for a canal under exclusive American control, although equally free to all nations, ceased to exist because of the attempt of the.
hero of Suez to outwit the Americans, and to beat them, so to speak, at their own game on their own ground? The answer to these questions we leave to the intelligence of our readers. In the meanwhile, having shown the historical interest of the Great Republic in this matter, and having given a short account of the explorations in the isthmus prior to the appearance on the scene of M. de Lesseps and his partners, we shall now proceed to show how the latter, having taken advantage of M. de Lesseps' good name, have used it to promote their own scheme.
CHAPTER III.

THE WYSE-RECLUS SURVEYS.—M. DE LESSEPS BECOMES INTERESTED IN PANAMA.

Commander L. N. B. Wyse and General Türr organize a company to exploit a Colombian concession.—The French pronounce the isthmus a terra still incognita.—Wyse and Reclus set about to settle the Unknown.—Their first expedition examines Gogorza’s line.—Unsatisfactory results of the “expedition.”—A second expedition is fitted out by the company.—Wyse goes to Bogota, and obtains a revised concession from Colombia, while Reclus surveys the line of the Panama Canal in eighteen days, and makes “elaborate” plans for several canals.—Concession in hand, Wyse goes on his travels, and comes to Paris to prepare a “congress” to approve of the Panama route.—M. de Lesseps lends his name to the scheme.

We have shown in the two preceding chapters that a great many efforts have been made to unravel the secret of the isthmus, principally by explorations organized with great care by the United States Government, who entrusted them to officers specially qualified for the work. There is no doubt that the Government was in earnest, and gave fair and careful consideration to the projects submitted to it.

While the American authorities were still conducting their investigations, M. Lucien Napoléon Bonaparte Wyse, then a lieutenant de Vaisseau in the French Navy, obtained a concession from the United States of Colombia, and with his brother-in-law, General Étienne Türr (Hungarian), and others, proposed to make arrangements

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for selling it. The first step towards the formation of the Panama Canal Company is related at length in the first one of the official publications of M. de Lesseps, and we will let it tell its own story.

In the "Historical Sketch" preceding the Compte Rendu of the meeting of the Paris Congress of 1879 it is stated that in 1875 the Committee of Commercial Geography of the Paris Geographical Society thought that, while it waited for the intervention of the Powers in connection with this canal matter, something ought to be done by the Society itself to solve the problem of the isthmus according to the explorations, the records of which were at its disposal. But we are told the Society soon found out that, "in spite of the great number of explorers, there was no topographical knowledge complete enough on many points of the Darien, and on many of the southern valleys of the Cordillera; and while such gaps existed in that knowledge it would be premature to pronounce conclusively on the choice of a route."

Very few persons will be willing to deny the soundness of that judgment.

"But," continues the sketch, "how were such costly explorations to be made? The committee could not even try and meet the expenses. . . . It was then that, on March 24, 1876, a comité français for the study of the piercing of an interoceanic canal was completed. . . . As soon as it was organized, General Türr and M. L. N. B. Wyse formed a société civile, which took upon itself to defray the expenses for the necessary explorations." At the end of the year an "expedition" was started.

This official account only corroborates what was already too well known. Here is an editorial note preceding an article which appeared in the North American Review as early as August 1879:
"It was rumoured in Paris during the late Canal Congress that the concession for the Darien Canal, which was held by a little company of which General Türr is president, was divided into 100 shares of 500f. each, and it seemed to be understood that a company of 400,000,000f. capital would be formed to purchase the concession from the Türr Company, and would pay the stockholders of this association 25,000,000f. for their privileges. Thus each share of 500f. would become worth 250,000f. With the fall of Sédan and the fortunes of the Second Empire a large number of the most prominent Bonapartists lost their means of subsistence, and found themselves in a condition bordering on beggary. There were few men of private resources among them. Some had been placemen or stock speculators, while others had been the recipients of constant and liberal gifts from the Emperor's privy purse. These gentlemen soon began to look to M. de Lesseps, a connection of the Empress Eugénie, for help and guidance. He alone of this helpless and hungry crowd could command the credit and confidence of capitalists. To pierce the isthmus of Central America had been the cherished wish of Louis Napoléon, and this project was not long in recurring to his dejected followers. Thus the scheme was revived and matured under the sponsorship and direction of M. de Lesseps, the executive duties of the undertaking devolving upon Lieutenant Bonaparte Wyse, whose sister is married to General Türr. A careful examination of the names of the French delegates to the Canal Congress shows how entirely it was packed with subservient friends of the fallen dynasty; nor is it well to overlook the fact that the shares of the Türr Company were largely held by them."

Before commenting on the explorations of M. Wyse
and his companion, Lieutenant Armand Reclus, according to their own records, we ask the indulgence of our readers while we note what M. de Lesseps, M. Wyse, and their friends were reported to think about them. We will continue to translate from the "Historical Sketch."

The labours of M. Wyse and his engineers "were hard, but they were conducted with great energy. Sr. Gogorza's route did not offer particular advantages; Messrs. Wyse and Reclus, going on further west, thought to open a more favourable way between Tuyra and the Bay of Acanti; but their operations were interrupted by the rainy season. Three members of the expedition died of fatigue in that laborious campaign.

"Messrs. Wyse and Reclus next year resumed their work, with the aid of Messrs. Verbrugghe, Sosa, and Lacharme. While M. Reclus finished the exploration of the Tuyra-Acanti, M. Wyse made that of the Isthmus of San Blas. The expedition was thus carried to the Isthmus of Panama, which was equally well studied. Since then the gaps were filled. Messrs. Wyse and Reclus had nothing else to do but to put their documents in order, and draw the lines of the several projects of sea-level canals which they proposed to open across the whole of these regions so valiantly explored."

This is French "brazen trumpet's bluster," and nothing else. It was the first act of the huge farce of the Panama Canal which some ambitious men imposed upon this credulous world, with no other purpose but that of making money out of M. de Lesseps' name.

In 1875 the Paris Geographical Society had resolved that it had not knowledge enough of the topography of the isthmus to conscientiously recommend a route for interoceanic communication; and Messrs. Wyse and
Reclus were sent out to "fill the gaps" in that knowledge. Let us see how they did it.

About the middle of December of 1876 M. Wyse and fifteen other persons, including guides, interpreters, naturalists, &c., began their explorations on the Pacific side of the isthmus. His instructions from the Society were to examine the route between gulfs Ubará (Darien) and San Miguel, by way of the Atrato and Paya rivers, which is known as the Gogorza route. Should it have proved impracticable, he was then to find out the best route "to the south and east of the line joining capes Tiburon and Garachiné." The reason of this limitation is that the Panama Railway Company had by its concession the right of way in the region north and west of that supposed line. Let the reader remark that the expedition was not to study the most feasible line absolutely, but the best one for which the Society had got a concession.

A party of engineers, under M. Celler, reconnoitred as far as Loma de Cacarica, and followed up several lines. He frankly admits that he made no special surveys, and yet he would propose a lock-canal from Tuyra to Pirri, thence to the Cupé River, thence again to the Tuyra between Pucro and Paca, from which point it would descend by the Tulegua and Cacarica valley to the Atrato, in the Atlantic. The total length would be 230 kilometres; five locks; one tunnel, measuring 700 metres; dams 40 metres in height across the Paya; summit level, about 50 metres above low tide on the Pacific side. M. Wyse reconnoitred a route by the valleys of Tupisa, Tiati, and Acanti-Tolo, as far as Tiati, the rest being left unexplored. He proposed the absurd plan of grilling or grating the Chucunaque in order to arrest the débris brought down by the freshets. Although M. Wyse did not go beyond Tiati, that did not prevent him from drawing the line of
the canal up to the Atlantic, the coast of which he placed at five nautical miles too far to the west. But then these are "small matters." He returned from the Tiati to Europe.

There is no use in giving the details of a scheme which was not studied upon the ground, and into which so many ludicrous errors have crept. Those, however, who wish to ascertain for themselves how the "gap" in science was filled by this first expedition should consult the report published by A. Chaix and Co., of Paris, in August 1877. It is enough to say that the Société Turr-Wyse was not satisfied.

A second expedition was made up of Commander Wyse, Commander Reclus, and Messrs. Sosa, Verbrugghe (engineer), and M. Ponyderseau. Most of them started from Paris on November 7, and on December 6 they left Panama for the Bayano and Mamoni rivers, in order to study the San Blas. In less than one week M. Wyse returned to the Chepo, from whence he wanted to reach the Bayano and examine the Icanti River. As, however, he reached the salto of Chararé, he had to return on account of the lack of pirogas, or canoes. This was on December 15, only nine days after the expedition had left Panama.

Commander Wyse then sent Commander Reclus to make a planimetric study of the Terrable River, one of the tributaries of the Bayano, while he himself, with M. Verbrugghe, went to the quebrada, or falls of Gaspar Sabana, near Chararé. By wading the river he reached the end of the Bayano. M. Reclus found the Terrable impracticable. The whole party then returned to Panama. This first excursion lasted a little over two weeks, including the time spent from and to Panama.

On Dec. 29 the commission started again, this time
to Yavisa (Southern Darien), which they reached on January 2, 1878. On the 3rd M. Wyse went to Pino-
gana to obtain men to aid the party. On the 8th they entered the Tiati River. On the 11th M. Wyse, 
accompanied by M. Verbrugghe, returned to Panama, after having spent just \textit{nine days} on the field, and three 
days after he had struck the river that he had gone to study. So far, M. Wyse had not spent on the field more 
than two weeks altogether in this second expedition.

On February 4 he and M. Verbrugghe left Aspinwall on 
board of a French man-of-war, \textit{Le Dupetit-Thouars}, for Acanti, in order to make a hydrographic survey of that 
bay. He then ascended the Acanti for a little way.

On the other hand, M. Reclus, having separated from 
the others, started for the Atlantic to join M. Wyse, and Sr. Sosa was to return to Yavisa. Reclus ascended 
with a few men the head-waters of the Tupisa, and reached the Atlantic, but having missed Wyse, returned 
to Yavisa, whence, on the 19th, all started for Panama, which they reached on the 25th. This excursion really 
came to an end on February 6, or thirty-five days after the party's arrival at Yavisa. The \textit{actual} work of M. Reclus lasted between January 14 and February 6.

Commander Wyse left for Bogota, the capital of the 
United States of Colombia, on February 25, and as the 
Magdalen River was quite dry, he started on horseback 
by way of Buenaventura. He thus reached Bogota on March 12, after a trip of fifteen days. The trip was made 
with such rapidity, he says, that "the inhabitants of the capital, accustomed to long ridings, were astounded. 
\ldots\ . It is true that I rode sometimes twenty-two hours in a day. But," he continues, "at any rate I arrived in 
time to treat with the Administration of President Parra, who, well aware of our efforts, had shown himself
favourably disposed to discuss the modifications which I was commissioned to ask in the concession of May 28, 1876, granted according to Colombian law No. 33 of same year." (See "Rapport sur les Etudes de la Commission Internationale," &c., Paris, Lahure, Imprimerie Générale, 1879, page 21.)

In view of the haste of M. Wyse it is not too much to conjecture that this trip to Bogota and an amended concession were the principal purposes of his expedition. President Parra's term of office expired on the last day of March, and its nineteen days of remaining life were turned to good account by the clever French promoter. On the 14th it was decided that M. Wyse should submit a new contract of concession, which he did on the following day. The details were then discussed for several days; the Government was made to give the company controlled by M. Wyse the right of way in all the territory of the United States of Colombia, having regard to the rights of the Panama Railway, and the grant of lands was for double the area of the previous concession. On March 28—in less than a week—the Colombian Government signed this most important contract. Such haste is unparalleled in any country, and almost justifies the belief that M. Wyse must have employed extraordinary persuasion to win over the unbounded confidence of the Executive of that distracted country in the last days of a dying administration. On March 23 the President signed the grant, and submitted it to Congress, who discussed the subject up to May 17, when the last amendments were disposed of. On the next day the new President signed the Bill. Twenty-four hours later on, M. Wyse was on his way back to Panama, which he reached in seventeen days—on June 4. The Société civile had at last got a concession to its
own satisfaction, embracing the whole isthmus connecting the two Americas, except Nicaragua and Tehuantepec. That was the point. As to the explorations to fill the gaps, they were only undertaken for the sake of decency and of appearances. M. Wyse had now to go to the United States and arrange with the Panama Railway Company, whose rights were still in his way, for it seems his views had been for some time fixed upon the line of that road as a fit one for the proposed canal. When he left for Bogota he directed Commander Reclus (who, as we know, had reached Panama on February 25) to survey the valley of the Chagres, and on the Pacific slope that of the Rio Grande or of the Caïmito. M. Reclus fell ill, and it was not until March 11 that he was able to start for Bernardino. On the 13th he ascended the Caïmito and the Bernardino. On the 14th he reached the Copé, and then passed over the Aguacate and the Congo, returning to Panama on the 28th. On April 2 M. Reclus commenced a reconnaissance of the valleys of the Obispo, Chagres, and Rio Grande, which is the line of the present canal. He writes in his diary ("Rapports" already quoted, page 126) that "that was not an exploration in the true sense of the word;" it was indeed a walk, if not a ride, over the Panama Railway line. He was accompanied by Sr. Sosa, who, however, left him a week later on, too ill to proceed, and when, after four days, he recovered, M. Reclus had an attack of earache, which caused him to return to Panama on April 20, and ten days later he left for Europe.

And that exploration, which was "no exploration," and lasted eighteen days, was the one on which the much-spoken-of Wyse-Reclus project for an interoceanic canal in Panama was based! The fifteen printed pages of M. Reclus' diary are silent witnesses of the shameful
manner in which these daring speculators, without any attempt at a serious study of the line, came boldly forward, proposing, not one alone, but several schemes for such a tremendous work as a canal. M. Wyse had already the concession, dated 1876, from Colombia; now he had a fresh one, altered to suit himself. The French savants had declared that too little as yet was known of the isthmus to enable them to make an intelligent choice of a route. It was necessary to play the comedy of science, and M. Wyse played it, we must admit, in a most grotesque manner. Eighteen days in Panama were enough for such wonderful geniuses as Commander Reclus and a fifth-rate Colombian engineer to clear up the scientific mysteries of the isthmus. In eighteen days, in spite of illness, these two men pretended to have finally decided the question that, as we have been showing, had perplexed many conscientious explorers. The canal between the Atlantic and the Pacific must be in Panama, if only the Panama Railway Company would let it be. Surely any man who wants to build a house for himself employs more than eighteen days in fixing upon a proper locality, for there are many conditions that must be weighed with care. But these men knew all about the Panama route, which is upwards of 47 miles in length in a direct line, crossing a torrent that rises 50 feet in twenty-four hours, and teeming with the most difficult problems of engineering; yes, they learned all about it in eighteen days' travel over it! In truth no work of average importance has ever been undertaken with such flimsy preparation. The whole transaction, from commencement to end, was suggestive of an attempt to grossly impose on the enthusiastic and patriotic people who believe in the name of M. de Lesseps; and what is especially sad in this whole affair is,
that M. de Lesseps himself, to whom unstinted praise is due for his glorious feat in the Isthmus of Suez, was now a partner—a particularly interested party—in this questionable business, in which he had staked his good name.

As we have said, M. Wyse's task was ended except for the matter of arranging with the Panama Railway. Before he left for the United States he made a visit to Nicaragua, not to try if he could supply an independent geographical society with the requisite gaps in science, but really to condemn it, as he does; for, it must be repeated, his concession was for Colombia and not for Nicaragua. On July 1 he sailed to San Francisco, and crossed the continent to Washington and New York, leaving the latter port on the last day of the month, and reaching Paris on the following August 11, bringing with him his Colombian concession. Here we drop the curtain on the first act of this play.
CHAPTER IV.

THE WYSE CONCESSION.—THE PARIS CONGRESS OF 1879.

The terms of the Colombian concession for the Panama Canal.—
The company gets 1,250,000 acres of land.—Stipulations as to
war-vessels in the canal.—As Nicaragua is the best route, MM.
Wyse and Lesseps pack a "congress" to endorse the Panama.—
How the men of science were snubbed at the congress.—Un-
seemly haste in settling the point.—Some unpalatable truths told
at the congress by M. de Lesseps' own friends.

During the whole time of these two expeditions of
Commanders Wyse and Reclus, it was the general im-
pression that the Americans generally favoured the
Nicaragua route as the most feasible. Such was un-
doubtedly the result arrived at by all competent authori-
ties who read the reports of the different expeditions
sent to the isthmus between 1870 and 1876, and also
by the committee of revision, under General Humphreys,
which had already presented its report. It is evident that,
once in Europe, and having got a concession from Colom-
bia, Commander Wyse had to act promptly on it, and his
first step would naturally be to have his route, as against
Nicaragua, preferred to and endorsed by at least an ap-
pearance of scientific authority, so that it might not be
claimed afterwards that the rival route was the best.
But let us first examine the terms of the concession of
M. Wyse, or rather of the Société Civile Internationale
du Canal Interocéanique.

As we have already stated, the contract of the conces-
THE WYSE CONCESSION.

sion with the Executive of the United States of Colombia was signed at Bogota on March 20, 1878, and was then submitted to the Legislature, who amended it in many ways. On May 17 M. Wyse signed a declaration accepting the contract with each and all the amendments, and the concession was then completed on May 18, when it was countersigned by the new President of Colombia.

By its terms the Colombian Government grants to M. Lucien N. B. Wyse, acting on behalf of the said Society, the privilege for ninety-nine years to construct and work a canal, the surveys for the route to be made by a commission to which two Colombian engineers were to be attached; the grantees to organize the "universal" company within two years, and the canal to be finished twelve years hence. All public lands required for the works to be ceded gratis to the Company, as well as a belt of land 200 metres wide on each side of the canal. Besides that, the grantees were to have, as an aid for the accomplishment of the work, 500,000 hectares (which is about 1,248,000 acres) of public lands in the localities which the Company may select. The ports at each end and the waters of the canal were declared neutral for all time. In case of foreign war the transit is not to be interrupted by such event, all vessels to pass freely without distinction, exclusion, or preference, on payment of the dues.

Art. VI, in the original concession said: "The entrance to the canal shall be rigorously prohibited to the war-vessels of those nations which are at war, and to those whose destination manifests their intention to take part in hostilities." As amended by Congress it reads thus: "The United States of Colombia reserve to themselves the right to pass their vessels, troops, ammunitions of war, at all times and without paying any dues whatever.
The passage of the canal is strictly closed to war-vessels of nations at war, and which may not have acquired, by public treaty with the Colombian Government, the right to pass by the canal at all times."

By way of compensation for the rights allowed to the grantees, Colombia is to receive a percentage on all the collections made by the Company, beginning with 5 per cent. on the first twenty-five years, and then 6 per cent. between the twenty-sixth and the fiftieth year, 7 per cent. until the seventy-fifth year, and 8 per cent. from the seventy-sixth year until the ninety-ninth and last year of the privilege. Four-fifths of such sums are to go to the Federal Government, and one-fifth to the Government of the State of Panama, the sum guaranteed by the Company to be never less than £50,000 a year.

Such are the main features of the Wyse concession of May 17, 1878. Commander Wyse at once started for Paris, there to organize his Company. But he met at the start with great difficulties. The Government of the United States, to begin with, could never look favourably upon this French enterprise, especially as the Government itself had treated for a concession for it a few years before. In fact, the Government, on March 13, 1872, had appointed a committee to study the different reports of all previous explorations, and on February 7, 1876, the committee had presented their report. The Government was evidently bound to take some decided step in the matter, when Commander Wyse went to the isthmus and began to treat for the first concession that he could find. But the greatest objection was that there were many different ideas as to which of the several canal routes was the best one, physically and financially speaking. The United States Government and private citizens had undertaken different explorations of the isthmus in
THE PARIS CONGRESS.

Darien, Tehuantepec, Panama, and Nicaragua, and the latter route, thoroughly explored by Colonel Childs in 1850–51, had been recommended by such eminent English engineers as Lieutenant-Colonel Aldrich—of the Royal Engineers, and James Walker, who had been appointed by Her Majesty's Government to examine Childs' reports. That route had recently been explored again by the U.S. engineer Menocal, under the supervision of Admiral Ammen, and was attracting very favourable attention in the United States. In order, therefore, to command capital, M. Wyse found it necessary first to secure the services of M. Ferdinand de Lesseps and of the Suez Canal people; and, secondly, to try and show that the Panama Canal route was the best, not only in Colombia, but in any place in Central America. And French tact came to the assistance of these enterprising promoters. They conceived the idea of an "International Scientific Congress," to be convened in Paris. If the Congress were really scientific and impartial, there would be great danger that they would select the Nicaragua route; therefore such a contingency was to be carefully avoided, for M. Wyse's grant was not for Nicaragua. A congress was accordingly made up mainly of persons indicated by the promoters. Even in the case of foreign delegates M. de Lesseps took care, in issuing the invitations, to suggest to the Governments the appointment of certain persons who had shown sympathy with M. de Lesseps' ideas; but in order to conceal his plan the great diplomatist, on the other hand, suggested the appointment of a few well-known friends of other schemes, or abstained from making suggestions.

The Congress met in Paris on May 15, 1879. It was composed of 135 delegates, of whom seventy-four were Frenchmen, and sixty-one foreigners; six from Great
Britain, eleven from the United States, six from Holland, four from Switzerland, only one from Germany; and so on. Among the eleven from the United States were Admiral Ammen, Mr. Menocal, and Commander Selfridge, perhaps the greatest living authorities respecting the isthmus, the first two having been delegated to appear by the United States Government; but to counteract their votes there were also such men as Mr. N. Appleton, of Boston, a personal friend of Lesseps, and two men from California, besides Mr. Cyrus W. Field, who were only there for ornament.

Among the French delegates, thirteen appear in the list as employés of the Suez Canal Company.

The Congress was called to order by the Comte de Lesseps, Admiral le Noury being honorary president, and then it organized itself into five grand committees, four of eighteen members each, and one, for the selection of the route, of fifty-four members, of which but two were Americans; so that the country under whose auspices several explorations for interoceanic communication had been made, and which was not yet satisfied as to which route was absolutely the best, was now to be overruled by men who had never been in America, nor ever studied the complicated problems connected with the proposed linking of the two oceans.

The Congress sat for just two weeks. Its purpose, its whole purpose, was to endorse the Wyse-Lesseps scheme, and we see not only all details of organization, but also all subsequent proceedings tending to that end. As there were honest differences of opinion among the French themselves as to a sea-level canal or to a canal with locks, Commander Wyse, equal to the occasion, had really two projects on hand, one for each.

In spite of the diplomacy of M. de Lesseps, the true
purpose of the Congress cropped out sufficiently in the meetings; and in the Compte Rendu, which we have before us, we find very suggestive remarks from some of the delegates.

M. Blanchet said that the Panama line was unhealthy. The whole place is a waste, where one cannot even get table vegetables, most of those consumed being preserves imported from Europe. The very maize eaten by the natives came from beyond the sea. (Compte Rendu des Séances, p. 229.)

At the meeting of the technical committee held on May 19 the same gentleman, who warmly proposed a Nicaragua route, based on the explorations of the Americans Lull and Menocal and modified by himself, complained that M. Wyse had put aside all these surveys in order to occupy himself only with his own scheme. And then he adds:—

"His (M. Wyse's) personal studies about the proposed line of the Chagres cannot deserve much consideration, for they were conducted by M. Reclus in the period comprehended between the 2nd and the 16th of April of 1878; that is to say, fourteen days." (See Wyse-Reclus Memoir, page 127; Compte Rendu, page 231.) We have reckoned eighteen days, because we include the whole time of M. Reclus' return to Panama.

But M. Blanchet, proceeding with his remarks, said the line of MM. Wyse and Lesseps had been explored personally in fourteen days; but even the map which was before the Congress was but the old map of the Panama Railway Company. Indeed, we have that map before us; it is dated 1857—twenty-two years before the Congress took place—and it is a reduction of the original surveys of the American Colonel, George M. Totten, who built the railway, and who died in New York in May 1884.
It would seem incredible that M. de Lesseps should have lent his name to such a scheme; but it was of the greatest consequence for him to push it through, for not only was it known that the Grant Administration in the United States was hastening the surveys of the different routes, but M. Blanchet himself had got a concession from the President of Nicaragua so recently as February 27, which fact, however, does not detract from the truth of his remarks. This concession, however, was never ratified by the Nicaraguan Senate.

In a communication, which was read at the meeting of May 26, M. du Puydt, the author of a plan for a canal between Puerto del Sur and the Gulf San Miguel, handled the Wyse-Lesseps scheme without gloves. He had then refused to present his plan, because, he said, "Le programme du Congrès est arrêté. . . . Il y a déjà longtemps que les organisateurs de ce congrès ont arrêté qu'il ne serait soumis à son examen que des projets de canaux appuyés ou revisés par M. Wyse." (The italics are not ours.) Furthermore, M. de Puydt complains of the unfairness of M. de Lesseps, who in his paper, "L'Isthme de Suez," spoke favourably of that scheme, and in 1875 complimented M. de Puydt for "realizing his (Lesseps') desiderata"; but later on said that he knew the scheme, but it was impracticable; and upon being written to about this opinion said, "Je ne connais ni votre projet ni les conditions des bouches de l'Atrato." In spite of that, M. de Puydt sent him his plans, accompanied by a report by Mr. James Brunlees, late President of the Institution of Civil Engineers of England; and then M. de Lesseps answered that he did not care to examine the scheme. In view of that, M. de Puydt concludes that the "Congrès n'était convoqué que pour le triomphe de M. Wyse tout seul . . . que
M. de Lesseps s’occupait tout particulièrement du succès et de l’avenir de la Société Civile,” which, as we stated, was Commander Wyse’s exploiting company. Here in England it would seem that a plan endorsed in any way by such an eminent authority as Mr. Brunlees ought to receive respectful consideration *per se*. But then the Congress was pledged to M. de Lesseps’ ideas beforehand.

Mr. Menocal was hardly heard at all, notwithstanding the repeated protests of Admiral Ammen and his own immense experience in the isthmus. There was always the excuse that the time was very limited. Well said Sir John Stokes at the evening meeting of May 20:—

“*The labours of this Congress should not be precipitated if they are to be of the value which the public is ready to attach to them.*”

M. de Lesseps had organized the technical committee to suit himself and his partners; what was wanted from the committee was that it should select the Panama-Aspinwall route as the best, as well as the sea-level plan. On May 27 M. de Lesseps said before the committee that the plenary congress was waiting that it should say *yes* or *no* to these questions. M. Ruelle thought it too much to ask the committee to do that, and gave his reasons for thinking so. M. de Lesseps answered: “*Il importe que la commission technique fasse ce qu’on fait ou vont faire les autres commissions. Chacune est maîtresse de son vote. Si vous ne le faites pas, il y aura indécision dans le résultat des votes du Congrès, ce que le public en général ne peut pas admettre.*”

These last words show the daring of the brilliant diplomatist; yes, *the public* in general, but they, Lesseps and Wyse, in particular, could not hear of the Congress adjourning after being in session for two weeks without
endorsing their own scheme, for which they had a concession in their pockets.

As M. de Lesseps perceived that the committee thought he wanted it to swallow rather a large pill, he still added:—"J'insiste de nouveau, d'une manière toute particulière pour que la commission technique fasse son rapport."

M. Ruelle, however, was not overawed, and remarked that the committee was "incompetent to decide all technical questions; the most that it could do was to say that such and such scheme presented such and such advantages."

M. Voisin also asked how it was possible to make such a report for the next day, especially as the committee was to hold another meeting that very evening.

M. de Lesseps answered:—"Il vous faut peu de temps pour faire ce rapport."

On May 27 the technical commission decided the first question presented to it—viz., that of the estimates of the cost of the different proposed canals. That vote was remarkable, and showed how laughable was the farce that M. de Lesseps was causing the Congress to play. The estimates were approved by twenty out of the fifty-four members of the committee. One member voted in the negative, twelve abstained from voting, while twenty-one absented themselves from the committee-room. No English or American member voted at all, evidently thinking that it was due to their self-respect not to lend their names to the decision of the committee as they had unfortunately lent them to the Congress itself before knowing the real purposes of its promoters.

On May 28 the chairman submitted the following proposition to the committee:—"That in the opinion of the committee the canal should run between Colon
and Panama." Here we see also twenty votes in the affirmative, nine abstentions, and twenty-six absentee votes. The third and last proposition was that the canal should be a sea-level one, and the proposition was carried by only sixteen votes of a committee, we repeat, of more than thrice that number of members.

And it was thus that this special committee of the International Congress endorsed M. de Lesseps and his associates. In the name of all that is serious we should like to know what great work has been undertaken with such levity and by such unworthy and sordid means. Of course, if any one in France referred to the above facts, all of which we have quoted from the official stenographic report of the Congress, he would be stoned as a false prophet, and as envious of the French glory of M. de Lesseps. But we wish all fair-minded men to examine these facts, and to draw their own conclusions, and we are sure that all will say with us: "Here we have some bold operators who retained M. de Lesseps, in order to use his prestige to carry out the daring scheme of the Panama Company; and here we have M. de Lesseps employing his brilliant and daring diplomacy to force that scheme down on the public—a scheme which was never studied properly, and which had been condemned by the few who were competent to judge of it."
CHAPTER V.

APPEALS FOR MONEY.—M. DE LESSEPS' TRIP TO AMERICA.

Public opinion about the value of the "Scientific Congress."—M. de Lesseps buys the Wyse concession and makes a vain appeal for money.—M. de Lesseps goes to Panama in order to verify the eighteen days' surveys of Reclus.—Ostentatious and ludicrous inauguration of the works.—M. de Lesseps goes to the United States.—President Hayes receives him with a message asserting American preponderance on the isthmus.—M. de Lesseps returns to France.—Systematic bribery of newspapers and "soothing" of bankers' feelings.—Another appeal.—Success.

HAVING exposed the mockery and delusion of the so-called "Scientific Congress," we left M. de Lesseps and M. Bonaparte Wyse in full possession not only of the Colombian grant for the Panama Canal, but also of an endorsement of that route by the Congress. Let us now see how the mockery was kept up until the time of launching the company.

As we have said, the Congress was dissolved on May 29, 1879. Three weeks afterwards, when it became known in America that M. de Lesseps was in earnest in lending his name to this speculation, and that he had begun his work with much audacity, some apprehensions were excited in the minds of thinking men. General Burnside, one of the New England senators in the Federal Legislature, moved a resolution to the effect that the United States "view with serious disquietude any attempt by the powers of Europe to establish under their protection
and domination a ship-canal across the Isthmus of Darien." It was maintained in the Senate that no canal could be wisely opened to the commerce of the world which was not put virtually under the protection of the United States.

In Paris and London that position of the Republic was much discussed at the time, while the French public got somehow the idea that not only the United States would oppose the canal, but that the scheme had not been properly studied, and the Congress had not dealt fairly with the whole subject. On July 11 M. de Lesseps, nevertheless, concluded his definite arrangements with M. Wyse's company, the Société Civile. We have before us a lithographic facsimile of this document, which contains eleven articles. The parties to the agreement are, on one side, Messrs. Türr; Bonaparte Wyse; C. Cousin, inspector of the Chemin de Fer du Nord; the Baron de Reinich, banker; Licaine Perdux, contractor; and Rampan, Colombian consul in Paris; and on the other side, M. le Comte de Lesseps. The latter was to fully organize a company at least two years before the expiration of the time given the concessionaire in the grant. The sum of 10,000,000 francs (£400,000) was provided to be paid by M. de Lesseps by way of compensation to M. Wyse's party for the studies of the route. M. de Lesseps was to deposit at once 750,000f., which were to be turned over to the Colombian Government, as per terms of the concession. In the organization of the company the Türr-Wyse party were to receive their pay as follows:—1,000,000f. within a fortnight after the definite organization of the new company; 4,000,000f. in cash, without interest, within a month from the date to be fixed by the board of directors of the new company for the payment
of the sum necessary to pay up one-half of the shares of the new company; and 5,000,000f. in paid-up shares of the new company. In case of M. de Lesseps' death, his rights were to descend to his eldest son, to the exclusion of minors.

That contract having been signed on July 11, M. de Lesseps was now ready to come before the public, and this he did without any delay, for on July 23, twelve days later, he published his prospectus, inviting subscriptions for 800,000 shares of 500f. each, on which he solicited a first instalment of 5 per cent. He wanted subscriptions for 400,000,000f., or £16,000,000, on which he called for £800,000. The public only subscribed for 80,000,000f., or £3,200,000, in which the first instalment would be but 4,000,000f., or £160,000. M. de Lesseps' intention was to make another call of 100f., or 20 per cent. per share (altogether 25 per cent.), and commence with £4,000,000. He had offered to pay 5 per cent. interest on the shares during construction. He, moreover, estimated the income from the canal to be 90,000,000f. a year, and reckoned that the shareholders would receive 11½ per cent. on their investment. In spite of the many puffs from the press, some bankers and a few newspapers exposed the hollowness of the scheme; the result being that the public lost confidence in it, especially as it became known that such eminent engineers as MM. Lavalley and Cotard, warm personal friends of M. de Lesseps, did not approve of the Panama route. The shares that had been subscribed for were at once offered for sale at a discount of 2f. to 4f., or say 20 per cent. on the amount of the first call. On August 19 M. de Lesseps gave it up, and announced in a circular that he might have convened a meeting of the subscribers, and have started the company with them;
but being certain of success, he preferred to wait until more light had been thrown on the value of the attacks which had been made on the scheme. He therefore returned the money to the subscribers, and declared his intention to shortly go to the Isthmus of Panama, and on his return to set the company on its feet again. The attacks were justified by the facts which we have stated; but the most influential papers of Paris had not ceased beating their financial drums on behalf of the scheme. In the Journal des Débats M. Paul Boiteau gravely said that “no feasible plan for a lockless canal had ever been found until M. de Lesseps, enlightened by the researches of M.M. Wyse and Reclus, hit upon one fit to become the symmetrical pendant of his European, African, and Asiatic work in the new world.” And he went on to say that “General Burnside is almost the only man in the United States who thinks the building of the Lesseps canal will infringe upon the Monroe doctrine,” and to make other similar barefaced misstatements (Journal des Débats, August 7, 1879). On the other hand, M. Planchet had written an article in the Revue des Deux Mondes for August 1, in which he proved conclusively that as recently as 1872, or five years before, this same M. de Lesseps distinctly regarded “the project of a canal through Nicaragua as the one which offered the greatest facility in execution and the greatest security in exploitation.” This letter of M. de Lesseps had been read at a scientific meeting in Paris; and Admiral de la Roncière de Noury, who was the honorary chairman of the Panama Congress of M. Wyse, warmly endorsed the opinion of M. de Lesseps.

In America the announcement of the fiasco in Paris did not lessen the opposition. Mr. Nathan Appleton, a personal friend of the promoter, declared on landing
from Europe that what M. de Lesseps was doing was reculer pour mieux sauter. It was thought that he was not to give up the scheme, and he would make a desperate effort to carry it through by all means, so that he would save his own reputation. Admiral Ammen and Mr. Menocal made public the true nature of the Paris Congress; and on August 26 Admiral Ammen was prepared to announce that on the 7th, General Grant, then abroad, had telegraphed that he would accept the presidency of the plan for the Nicaragua canal which had been proposed long before the Paris Congress was convened.

In September M. de Lesseps announced his plans more definitely. He proposed to leave for the isthmus in the first or second week in December, so as to begin the work of verifying the so-called Wyse-Reclus survey. For that purpose he would take with him a corps of able engineers; and as in the United States people were showing what he thought to be unreasonable opposition to his scheme, he proposed, after leaving the isthmus, to proceed to New York, Washington, and San Francisco, in order to explain to the American people that the Panama Canal was a work of civilization, that it interested Americans most directly, and that it was a private industrial enterprise, which had nothing to do with the Monroe doctrine. After that he would return to Paris and again appeal to the public. M. de Lesseps declared that the verification of the survey would take about a month.

It is remarkable that the studies of this Panama-Aspinwall line, which occupied MM. Wyse and Reclus but eighteen days, and which were forced through the Congress, should now require thirty days to verify them. Naturally, the "verification" was a blind. M. de Lesseps, knowing the hold he had on French imagination, wanted to play another comedy. "I have been to
Panama, and I am now satisfied about the feasibility of the canal; I have seen the Americans, and I have arranged all difficulties with them.” That is what he proposed to say on his return, and on applying again for funds.

M. de Lesseps, indeed, left France by the steamer *Lafayette*, which reached Aspinwall on the night of the last day of 1879. The expenses of his trip were to be defrayed by future contractors, such as M. Couvreux, of the firm Couvreux-Hersent, who had had a great deal to do with the Suez Canal and the straightening of the Danube. M. de Lesseps took with him his wife, three of their children, and a suite of sixteen gentlemen, of whom thirteen were said to be engineers. Among them was M. Dirks, of Amsterdam, very well known for his canal works in Holland, who went specially to examine the Chagres problem. They looked very much more like a “pic-nic party” than like a scientific committee. The writer of these lines was with them for twelve days out of the thirty in which they intended to accomplish the verification of a survey that had never been made; and he can say that there was not a stroke of earnest work done in those days, and that many of the young men were more interested in fishing in the Bay of Panama than in testing rocks. The exposure of these facts by American special correspondents made M. de Lesseps less careless of appearances, and the “verification” actually lasted something like six weeks.

An English or American engineer would have begun the verification without any fuss; but M. de Lesseps had recourse to other means. He had said in Paris that the work would commence on the first of the year, and therefore he was bound that both in New York and Paris the world should know that “work in the canal had begun.” That was part of his plan, and what he came to
the isthmus for. He therefore organized a fête; the solemn inauguration of the "work" was to take place at the mouth of the Rio Grande, off the Bay of Panama. A steamboat was at his disposal, and of that of everybody who could go. A beautiful shovel and pickaxe had been brought from France, speeches had been prepared by himself, by the Bishop, the representative of Colombia, and others. There was some delay, it is true, for at the start the steamboat could only approach within two miles of the spot of land where the first stroke with the pickaxe was to be given, as the tide had gone down. The whole fun seemed to be spoiled. In the meantime, as the telegraph office in Panama closed early, the correspondents of the foreign press had already despatched the news of the impending opening of the survey just before embarking. M. de Lesseps, however, was equal to the occasion. He called the audience together (a difficult task indeed, seeing that cognac and champagne had been freely distributed for two hours), and said that inasmuch as the first stroke on land with the pickaxe was only a simulacro (he employed the Spanish word itself), he did not see why the whole thing could not be done right there on board. The Bishop blessed the work, and all the speeches were delivered, just as though the party were on land.

We have mentioned this apparently trifling incident because it is typical of the sham and charlatanism of the whole thing. In truth, the Paris Congress had been but a simulacro, and now by another simulacro M. de Lesseps "began work" in the isthmus—of course much to the admiration and glory of the French nation.

On February 14 (i.e., in six weeks) the committee of engineers reported to M. de Lesseps that the work was entirely practicable by building a breakwater in
Aspinwall, and also by erecting at Cruces, near Matachin, a great dam with sluices—nothing new on M. Wyse's scheme; and about March 1 M. de Lesseps landed in New York, and after a brief stay proceeded to Washington, where the authorities had been busy with the canal affairs. A Select Committee of the House of Representatives had unanimously adopted a resolution of Mr. Frye, stating that any form of protectorate by a European nation on the isthmus was against the settled policy of the United States, and that it was the interest and right of that Government to have exclusive control of any canal to be constructed across the isthmus.

The New York Society of Civil Engineers had also been discussing the whole subject of canals, and Admiral Ammen and Mr. Menocal gave their experience obtained at the isthmus.

M. de Lesseps was received with cold politeness. Had he been visiting America with only the laurels of the Suez Canal, no man would have had a warmer reception there; but he chose to play a part unworthy of his reputation in that great undertaking, and he was received almost with indifference. A banquet and a reception were given to him, to be sure, by the friends of Mr. Nathan Appleton, in New York, and the Geographical Society also honoured him; but on the whole M. de Lesseps was not noticed. In Washington he had an interview with the President, in which he said that his company was a private affair. The President answered that he was glad to see M. de Lesseps, but he added that whoever might build the canal, the people of the United States were convinced that they must have the preponderating influence over it. M. de Lesseps then volunteered to appear before the Select Committee of the House of Representatives, and
while he was still in Washington, the President, on March 8, sent to Congress a message containing the views of the American people on this matter of inter-oceanic communication, such as are set forth in the following sentence:— "It is the right and duty of the United States to assert and maintain such supervision and authority over any interoceanic canal across the isthmus that connects North and South America as will protect our national interests." The President said furthermore:— "The capital invested by corporations or citizens of other countries in such an enterprise must in great degree look for protection to one or more of the great Powers of the world, and no European Power can intervene for such protection without adopting measures on this continent which the United States would deem wholly inadmissible."

M. de Lesseps might have protested against the doctrine, and the Secretary of State, Mr. Evarts, who had been the lawyer, and whose firm in New York were still the lawyers, of the Panama Railway Company, which was anxious to sell the road to the Canal Company for $20,000,000 (or nearly three times its cost), would undoubtedly have been pleased to aid M. de Lesseps in that protest. But what the great diplomatic impresario most wanted to avoid was to appear in France as opposed to the policy of the United States. French money had been refused him on account of that opposition, and now he must go back to Paris and say that he had overcome it. The President's message would therefore have completely upset a man of less nerve and daring than M. de Lesseps; he simply caused M. de Bionne, his right-hand man (since deceased), to telegraph his son in Paris, and to give the telegram to the American papers, saying, "The message of the President assures the political security of the canal."
(See New York papers of March 10.) What the President said has been quoted above—he did not wish to see European corporations building canals in Panama; but M. de Lesseps was equal to the occasion, and consistent once more with all the plot of the play of which he was the protagonist.

After his return to France a different policy was initiated by his friends as to the press and the bankers. They now set themselves to work to have the favourable opinion of all possible newspapers, and several sheets were started by characterless and needy adventurers in order that their own attacks on the Panama Canal might be silenced. The result was that M. de Lesseps was glorified everywhere; his achievements on the isthmus and in the United States were sung with fervour and unanimity. The Americans had only been envious of la gloire française. The canal route had been carefully examined by the most eminent men, and found not only practicable, but much easier and less expensive than thought at first. The Suez Canal was a gigantic work in comparison with the bagatelle of the Chagres difficulties. As to health in Panama, M. de Lesseps pointed to the fact that he had taken his wife and children with him, and here they were again, stronger and healthier than ever. Of course he did not go into particulars as to American opposition, nor as to the way in which the "survey" of M. Wyse had been "verified," nor as to the fact that he went to the isthmus in January, one of three months in which it is comparatively inhabitable by European travellers. He succeeded admirably in imposing his raw scheme on the French public, to whom he again appealed for money, and who responded this time with alacrity, bringing him their savings, as they had formerly brought them for the Suez Canal.
CHAPTER VI.

THE FORMATION OF THE COMPANY.

M. de Lesseps' purpose in going to America.—An inside view of his "commission" of engineers, technical and international.—Their estimate of cost higher than that of the Congress, when all items are considered.—M. de Lesseps decides to cut down the estimate by nearly £7,500,000.—The estimate is still further reduced, so that from 1,040,000,000f. it is now 600,000,000f.—How M. de Lesseps' voyages were reported.—His propaganda in Europe after his return.—He opens subscriptions for the company's shares.—The subsidized press.—Complete success: 102,000 subscribers, of whom 16,000 are women.

The reason of the failure of M. de Lesseps in 1879 was, as we have stated, the prevalent belief that not only the canal would not pay, and the Wyse surveys had not been adequate enough for anybody to base on them a fair estimate of its cost, but also that the United States, who should be more interested in the work, were rather opposed to its being carried out by Europeans, because these Europeans would bring about complications in the neighbourhood of a country which does not maintain an expensive navy. M. de Lesseps' purpose in going to Panama and the United States was therefore twofold. In order to overcome the first difficulty, he created what he bombastically has called the "International Technical Commission," for the purpose of verifying the surveys of Wyse and Reclus. In order to overcome the second difficulty he proposed to go from Panama
to the United States. The whole thing was a perfect farce. His "international commission" had a competent hydraulic engineer, Mr. Dirks, and a competent mining engineer, M. Boutan, who was to examine the hardness of the rocks. Colonel Totten, now old and broken down, was also made a committee-man. He was an employé of the Panama Railway directors, who were anxious to sell the road to the Frenchmen. Colonel Totten is the same gentleman who never believed in a canal through Panama, and had so reported to Kelley, as we have stated in the first chapter. There was another American in the committee, a "General" Wright, an ex-employé of the Pennsylvania Railway, whose mental gauge can be measured from the fact that he still wore the habitual white linen cap used by the employés of that road, although for years he had had nothing to do with it. The poor fellow was utterly unknown in the United States as an engineer, and in Philadelphia, where he resided, he was only known on account of irregular habits which brought his life of misfortune to a sad end. The other committee-men were a young man, a son of M. Couvreux, wholly inexperienced; M. Dauzats, ex-chief of service in the Suez Canal, of whose unfitness we shall have occasion to speak hereafter; M. Blanchet, a very conscientious fellow, but in the employ of Monsieur Couvreux; and finally, two fifth-rate Colombian engineers—two soft-handed, bland gentlemen, who always dressed with extreme neatness; that being all that could be said of them. Such was the "International Technical Commission."

They signed their "report" on February 14, 1880. They found that the canal would cost $43,000,000 without preliminary, banking, and administrative expenses, and interest during construction; therefore they
found a higher figure than the Congress of Paris. Besides that, they found that there were 75,000,000 cubic metres to be excavated instead of only 46,000,000, as M. Wyse and the Congress had calculated. But they reduced the contingencies from 25 per cent. to only 10 per cent., while they made a different distribution of the excavation according to the resistance of the soil or rock, thus bringing the expense to a minimum.

Even that minimum, however, was too high for M. de Lesseps' purposes. He therefore, while on board the Colon steamer on her voyage from Aspinwall to New York, wrote a note in which he cut down with his pen not less than 184,400,000f. from the estimate of his own international engineers, thus reducing their total to 658,000,000f. He dictatorially diminished 75,000,000f. from the derivation of the Chagres, 12,000,000f. from the lock in Panama, 40,000,000f. from excavations, 20,000,000f. from damming the Chagres, and 38,000,000f. from contingent expenses, which he thus reduced from 10 to 5 per cent. Why he took any engineers at all with him we fail to see, if on February 22, on the high sea, he overruled their finding of February 14—a week before. Even if M. de Lesseps were an engineer who had studied the whole matter on the ground, he could not be justified in so doing. Evidently, while on his voyage, he figured up the canal scheme and found that he must reduce his capital to 700,000,000f., or £28,000,000, and so he reduced it with a stroke of his pen. The whole thing was intended to mislead the French investors for whom it was concocted.

Henceforth M. de Lesseps was to say that the canal would cost only 700,000,000f. at the outside. Of course he knows that, even if that sum were correct, it did not include administration, banking, preliminary expenses,
concession, and, above all, interest during construction; nor the cost of the Panama Railway. But that did not matter. His object was now to assure the world that he, of Suez Canal notoriety, had gone to Panama, and seen with his own eyes that the canal of Panama would cost no more than 700,000,000., or £28,000,000.

His innumerable trumpeters in Europe repeated the statement ad nauseam, and they also assured the French peasants that their great hero had gone to America and charmed all statesmen—these being now convinced that they had been wrong, and that there was now the closest entente cordiale between him and them.

It is curious to see how M. de Lesseps' various steps in the isthmus and in the United States were reported in France. A correspondent in the New York Herald made in Panama a polite and pleasant after-dinner speech. It was reported that the Herald was now the great friend of M. de Lesseps' enterprise. The dinner given in New York to M. de Lesseps was made to represent a tremendous manifestation of approval to his scheme: the chairman of the dinner was a Brooklyn clergyman whose financial or industrial opinions nobody knows or cares about. The fact is, that the dinner was very conspicuous for the lack of truly representative men; it was nothing more than a very cordial and spontaneous welcome to the distinguished foreigner of Suez Canal fame.

M. Marius Fontane, secretary of the Suez Canal Company, had the effrontery to write in the Bulletin, No. 15 (page 122), that the commission "had found the Panama Canal easier to build than had been anticipated by the Congress . . . . and had adopted an estimate for the cost which is inferior to the total that had been fixed upon by the Paris Congress." Let anybody compare the estimate of the latter in the Compte Rendu, page 311,
and the commission's report in the *Bulletin*, No. 14, pages 114, 115, and see how shamefully busy such men as Fontane were in misstating the facts to the French public. This same person says in the same breath that all American susceptibilities were then smoothed over by M. de Lesseps; and yet a little further on in the same *Bulletin* we read the message of President Hayes against foreign control of any canal!

The late M. Bionne condensed in the following words (*Bulletin*, No. 27) the main idea of M. de Lesseps with the "commission:" — "An international commission, composed of the best known of the most distinguished engineers went with M. de Lesseps over the ground, and after the most careful surveys and the most profound study, concludes that the canal is perfectly practicable."

But here is how M. Paul Boiteau delivered himself in the columns of the once respectable *Journal des Débats*. The Congress, he says, valued the works at 600,000,000f. *which is false*; the commission of engineers had now estimated them at 843,000,000f., but including unforeseen expenses. M. de Lesseps had seen his way to reduce these to 658,000,000f. But even this latter sum is a great maximum. Economy, common economy, would reduce the figure to 600,000,000f., which "will thus remain the most acceptable average for the intrinsic expense of the construction."

After visiting New York, M. de Lesseps went to Washington and San Francisco, whence he returned to New York, sailing to Liverpool, where he arrived on April 12, 1880. He was absent from France just four months; in those four months he spent nearly a month in going to the isthmus, another month in going from the isthmus to New York and from New York to France,
and in the remaining two months he settled all the great engineering and financial problems of the Panama Canal, and he visited New York, Washington, and even San Francisco—to go to which city he must have spent at least two weeks in actual travelling to and from it. That is not activity, wonderful activity; it is mere pretence of having done what could not have been done by the nature of things.

On his return to Europe M. de Lesseps made an extensive lecturing tour in England, Holland, and Belgium, and also in France. It was a propaganda for his own scheme, which he was perfectly entitled to make.

In July, M. de Lesseps announced that *new calculations* had been made at the isthmus, from which it appeared that the "rectified profile did not make the total cube to be excavated greater than 72,986,016 metres, which was to cost 517,673,874". His commission had found 75,000,000, and so it appeared that that close figure showed the great care with which the ground had been surveyed by the committee. Imagine that not long afterwards this same M. de Lesseps admits that there are 125,000,000 of cubic metres!

But even in the midst of these foolish statements the whole truth would occasionally burst forth. Thus we see, in an elaborate article on the cost and work of the projected canal, published in the *Bulletin*, No. 28, for October 15, 1880, the admission that "only after the works have begun can the solution of such problems be made definitive." It is announced that further studies on the Chagres have proved that the great wall or dam, with sluices, proposed by Wyse, and endorsed by the commission of Panama, *could not be built* on account of lack of a stony foundation for it, and that a *barrage* or dam, made up of fillings and stones taken from the Culebra
was the thing to do. This artificial mountain was henceforth to take the place of the now suddenly condemned mile and a half wall.

In October 1880 the cost of the canal was once more interfered with, and reduced, as if by magic, to 530,000,000 francs., including unforeseen expenses. We will treat of the vicissitudes through which the estimate of cost of the Panama Canal has passed; but meanwhile we will briefly recapitulate the figures up to that time:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>M. Wyse estimated it in 1879</td>
<td>427,000,000</td>
</tr>
<tr>
<td>Congress of Paris, in 1879</td>
<td>1,044,000,000</td>
</tr>
<tr>
<td>Lesseps' commission, on Feb. 14, 1880</td>
<td>843,000,000</td>
</tr>
<tr>
<td>M. de Lesseps himself, on Feb. 27, 1880</td>
<td>658,000,000</td>
</tr>
<tr>
<td>Rectified estimate, Sept. 1880</td>
<td>530,000,000</td>
</tr>
</tbody>
</table>

The first estimate does not include unforeseen expenses, and the latter does allow 10 per cent. for lighthouses and unforeseen expenses. In the latter the handling of the Chagres is reduced from 175,000,000 francs., as per Lesseps' commission seven months before, to only 30,000,000 francs. — viz., 10,000,000 francs. for the barrage and 20,000,000 francs. for subsidiary channels to be opened. The total excavation, 72,986,000 cubic metres, is put down to cost 430,000,000 francs., or less than 6 francs. per cubic metre!

Never was there a more shameful tampering with figures than that, unless it was at each of the previous attempts to mislead the public. Just imagine that the expenses of administration and interest during construction, on which the company is at present spending 40,000,000 to 50,000,000 francs a year, is put down at 88,000,000 francs. for the whole period of the construction!

But what is the use of analysing the estimate? It was concocted in order to make a fine appearance in the
THE FORMATION OF THE COMPANY.

prospectus that was soon to be issued of the company. The time had come for another brilliant stroke. A syndicate had been formed, and £500,000 had been pledged, and a great part of it was now freely spent with the press. The whole "propaganda" of the previous twelvemonth had come to bear its fruit.

On November 15 M. de Lesseps issued his first prospectus in the shape of a circular to bankers and to those who had subscribed for shares in the miscarried issue of 1879. He repeats what he has said in his circular of August 14 of that year, and now he asserts that "his previsions" had been fulfilled—that is to say, that the criticisms on the scheme, when first brought out, were unjust. He says that MM. Couvreux and Hersent, contractors of several great works, "are ready" to undertake the construction of the canal for 500,000,000f., or £20,000,000; that the Americans have now recognized that the work to be undertaken has no political bearing, and is particularly for their own benefit. "The full co-operation of great and powerful American banking houses shows the results of my trip to the United States," says M. de Lesseps.

He then says that on July 7, 1880, he organized in New York a Comité Américain to "represent the interests of the company in everything that concerns the observance of the neutrality of the canal as defined by Art. V. of the Law of the Concession of Colombia." Thus there were no more obstacles in his way except the possession of funds, which he now asked for. "The universal company shall be constituted with a capital of 300,000,000f. It being estimated that the total expense will reach 600,000,000f., or £24,000,000, the sums necessary to make up the difference will be provided, as the work proceeds, by the issue of debentures, so that
the shareholders may benefit from greater profits in the enterprise."

It seems incredible that in any civilized country such a prospectus should go almost unchallenged, and yet that is the fact. The Paris Congress had estimated the work at 1,040,000,000f.; M. de Lesseps' engineers, only nine months before, put it at 843,000,000f., with but 10 per cent. for contingent expenses, and with nothing for interest during construction, for expenses of administration, banking, &c. Now, M. de Lesseps does not say that Messrs. Couvreux and Hersent have actually entered into a contract to build the Panama Canal for 500,000,000f.; of course not. They have "declared that the execution of the canal would cost no more" than that sum. M. Couvreux was, indeed, the partner of M. de Lesseps. He had made him advances of considerable sums of money for him to carry out this scheme. He grew rich in the Suez Canal, and he is a sound businessman, whose intent was by no means to build the Panama for 500,000,000f., but to get (1) his own money back, and (2) to sell to the new company dredges and other material suitable for digging the Suez, but wholly unsuitable for Panama, as it has come to happen. And yet M. de Lesseps, quoting the mere opinion of these contractors, has the courage of assuring the French that the Panama Canal would cost no more than 600,000,000f.!

The wholesale puffery of the periodical press at the time of applying to the public for money was most nauseous. The Journal des Actionnaires announces that the "canal project had been welcomed with enthusiasm in the United States." The Messager de Paris, which a few months before advised the public not to subscribe for Panama shares, now said that it had been "converted" by the "serious studies" made by M. de Lesseps in
Panama. (Why, then, did he not adhere to the figures of his own men?) The *Journal des Débats*—which in this matter has always been pre-eminent in arithmetical jugglery, and in its unconcern for truth and for the interest of the poor investor—the *Débats* refers to the "offer" of M. Couvreux to take up the works at 512,000,000 francs, to which the editor adds 88,000,000 francs for interest during construction, banking, administration, &c. He then adds by a stroke of exaggerated liberality 100,000,000 francs more, and on the 700,000,000 francs, or £28,000,000, bases a calculation by which the shareholder will make about 14 per cent. on his money. The *République Française* decided that the canal would be made in six years for 600,000,000 francs, and that the shareholder had before him 15 per cent. on his investment. *La Liberte* grew ecstatic and biblical, scolding those who had no faith in M. de Lesseps, "who comes before you with the authority of science." The writer's appeal is altogether made from the standpoint of aethetical civilization. "Invest in these shares," he says, "and by-and-by you will be proud of your part in opening this work of civilization." More, "the result will be a surprise to those who have but faith in our great fellow-countryman."

The *Figaro*, which at least never expects to be taken up seriously, after drawing a picture of the international commerce passing between the two American continents within seven years, thus leaving M. de Lesseps free to undertake some other Titanic work, makes the homely remark that even the sublime things of this life have their prosaic side, and the prosaic side with Panama is that money is necessary for the marriage of the oceans.

Such was the general tone of the French press. All
possible agencies worked up "enthusiasm" under the pressure of several millions of francs spent in systematic perversion of truth; and the masses of the French people brought in their savings to M. de Lesseps. He wanted to issue 600,000 shares, or rather 590,000, as 10,000 were at once allotted to the concessionaires: the public showed their faith in M. de Lesseps by subscribing for 1,200,000 shares, or about double the amount offered. Well could M. Bionne sing "Hosannah" to his chief, pointing out the great difference in the situation a year before, when they were starting to Panama with their "commission," and now when they had got their money. The first fight was closed.

The number of subscribers was altogether 102,230, and as they subscribed for different numbers of shares up to the total amount of 1,206,609 shares, when there were only 590,000 to be allotted, and as the former subscribers of 1879, as well as the Suez Canal shareholders, were entitled to the whole number they now subscribed for, the greater number of applicants had to be content with but one-third and one-fourth of the number of shares that they asked for. Of the total 1,206,509 shares subscribed for, 994,508 were asked by French people in France, and 212,101 abroad—principally in Spain. No shares were taken by people in the United States, except a few reserved for the bankers appointed by the company. The allotment was made to the 102,230 applicants as follows:—

<table>
<thead>
<tr>
<th>Shares</th>
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<tbody>
<tr>
<td>80,837</td>
</tr>
<tr>
<td>19,143</td>
</tr>
<tr>
<td>3,208</td>
</tr>
<tr>
<td>554</td>
</tr>
<tr>
<td>347</td>
</tr>
</tbody>
</table>
THE FORMATION OF THE COMPANY.

142 had from 201 to 300 shares.
29 "" 301 "" 400 ""
37 "" 401 "" 500 ""
 7 "" 501 "" 600 ""
12 "" 601 "" 700 ""
 2 "" 701 "" 800 ""
 3 "" 801 "" 900 ""
 8 "" 901 "" 1000 ""
14 "" more than 1001 ""

Besides the subscriptions of families including women, 16,000 women were inscribed as shareholders. The importance of the minute division of the shares of this Panama Company becomes more striking when one observes that such a strong company as the Paris-Lyon-Méditerranée Railway, with a capital valued at 1,200,000,000 francs, and with 800,000 shares, has but 33,000 shareholders. Now, the 600,000 shares of the Panama Company were divided among 102,000 persons.

Nothing could more forcibly prove the undisputed hold of M. de Lesseps on the imagination of French people than the above result. No man in the world could command such unmistakable evidence of personal confidence, and it is touching and grand to record this rush to invest in Panama shares. Whether M. de Lesseps deserved that confidence of the people—of the 16,000 women full of faith in him—is another question, which we leave to our readers to decide in view of the evidence we are bringing before them. This is a long story, full of detailed and concatenated facts, which can be tested by any reasoning man who may seek after truth, and without the silly appeal to what M. de Lesseps did at Suez.
CHAPTER VII.


We are aware that it is most difficult to estimate even approximately what would be the cost of an undertaking of such magnitude as the Panama Canal. Even works of a less problematic character cannot be valued with absolute accuracy. Unexpected emergencies arise which frustrate the most careful calculations of the engineer and the financier, and it is for this reason that all great enterprises should first be carefully studied in all their aspects. As there is great difficulty in closely estimating the ultimate cost of a gigantic undertaking, proper care should be taken at the start in collecting all the elements which will help in making an estimate. If you want to build a palace in a certain locality that you have never inspected, but over which somebody else has walked and has then written about it some perfunctory remarks, you first dispatch a competent man to report to you about the locality, so that you at least may start with a tolerable knowledge of the ground—if you have first to fill up or to dig the soil, or even to blow up some granite quarry. And if your surveyor finds some stream crossing the intended site of your palace—a stream which every year is known to swell to the proportions of a torrent—you first study how to control that stream. These and other elements are properly weighed in your mind, and even when they do not offer any great diffi-
culty to your engineer or architect, you take into account what they cost, because their great cost may be an insuperable difficulty to you.

Now, what has been the case of the Panama Canal? M.M. Wyse and Co. see that the Nicaragua people are trying to go on with their scheme; M.M. Wyse and Co. snatch a concession from Colombia, and secure the name of a great promoter, to whom they sell their concession. The great promoter at once takes the business up. He is contented with the surveys made by incompetent men in a few days. He imagines that he must have his canal without tunnel. Through his influence some men of science meet in a Congress which is packed by himself with his retainers, so that his own scheme may be given the benefit of the endorsement of an apparently scientific and international council. He even causes the Congress to estimate the cost of the work, of the feasibility of which the Congress was not satisfied. The estimate is given with reservations enough to make him despair. He then goes over the ground, and in a little over a month his new instrument of "science" gives a new estimate almost doubling the quantity of soil and rock to be excavated. He then, without any new "studies," cuts down the cost estimated by his own men. Is it any wonder, then, that the great promoter to-day admits that the total excavation to be made is nearly three times as much as that which his first Congress had in view when it estimated the total cost of the canal at about double the amount which is now claimed by the great promoter to be the expected outlay? Can you believe what he says? Would you have undertaken a work in which in a few days you find that there are 75,000,000 of cubic metres to excavate instead of 46,000,000, and which in a few months more you find amount to 125,000,000? Would you have touched
that business at all? and, in your own selfishness and vanity as a renowned contractor, would you persistently and recklessly assure your capitalists that the work will only cost a trifle over one-half of the estimate made when you thought there were only 46,000,000 of metres? Well, that is what M. de Lesseps has been doing.

At the Paris Congress, M. Wyse estimated a Panama Canal with no tunnel at 427,000,000f., divided thus:—

Excavations, 46,150,000 cubic metres . . . . . . . . 361,600,000f.
Chagres, lock at Panama, breakwater, and other works . . . . . . . . 65,900,000f.

For a canal with tunnel he had presented an estimate making its total cost 380,000,000f.—no contingent expenses being added in either case.

But the sub-committee on estimates was far from satisfied with his calculations.

Adding 25 per cent. for unforeseen expenses to the Wyse project for a canal with tunnel, the cost would be 475,000,000f.; and the other one, with a through open-air cut, would come to something like 535,000,000f.

At the meeting of May 21, M. Cotard, giving some results arrived at by the sub-committee—composed of himself; M. Favre, the contractor of the St. Gothard tunnel; M. Lavalley, contractor-general of the Suez Canal, and representing the Paris Society of Civil Engineers; M. Ruelle, general director of construction of the Paris-Lyon-Méditerranée Railway; M. Garay, a Mexican C.E.; and M. Couvreux—reported that the sub-committee estimated the cost of the Wyse canal, with a tunnel, at 747,884,812f., including 25 per cent. for contingencies, but not reckoning [we quote]—

"1. The expenses necessary not only to place the works of excavation beyond danger of the water, but also to affect excavations under water.
"These expenses cannot be estimated even approximately, but they will be very great; most likely they will exceed 100,000,000f.

2. The interest during time of construction, which should be put down as ten years.

3. The several liabilities of the company; among them the indemnity to the Panama Canal Company.

M. Lavalley, speaking immediately after the presentation of the report, called attention to the immense difficulties of the work in the valley of the torrential Chagres; to the obstacles, almost insuperable ("sur les embarras presque insurmontables"), to doing the work dry. He believed that it was of absolute necessity to deviate waters from the Chagres at one or more points. These are difficulties of the first order, which add to those already inherent in the work itself, and which will increase still more heavily the total cost of that canal. ("Toute la dépense importante augmentera encore très peniblement le coût total de ce canal.")

M. Cotard, addressing the meeting, once more (we are quoting from the Compte Rendu, pages 261, 262) "calls attention to the importance of the reserve made by M. Lavalley. . . . There is an unknown which we must confront seriously, remembering the risings of the torrent, and consequently its irruptions. That unknown would be still further increased if, as M. Wyse suggests, the tunnel be suppressed, and enormous cuttings be made" in the Culebra section.

That, we repeat, is the opinion of two gentlemen who are extremely friendly to M. de Lesseps. This estimate of the sub-committee, be it remembered, was for a sea-level canal with a tunnel, and M. Cotard said that "the unknown will be still further increased" if the tunnel were suppressed. Now, that is exactly what has been
done. We have to add to that total the difference between the solid rock excavation for a tunnel, estimated by the sub-committee at 297,220,000f., or £11,888,000, and the cost of deep cutting so as to make the canal an open-air one. Remember that in two kilometres of the Culebra section there are 25,000,000 cubic metres to be taken out; whereas by the Wyse tunnel project there were to be only for the whole tunnel 6,044,670 cubic metres ("Rapport de la Commission International," page 54), and you may only have but a faint idea of the increased expense. M. de Lépinay, a member of the second sub-committee, read before it a paper (Compte Rendu, pages 293-9), in which he said that the "sea-level scheme for a canal in Panama brings about an expense of more than 1,000,000,000f. . . . The reason of this exaggerated cost is that they want this canal to be made after the model of the Suez Canal—that is to say, with no locks—and yet its natural conditions are so very different. In Suez there is no water, the soil is soft, the country is almost on the level of the sea; in spite of the heat, the climate is perfectly healthy. In tropical America there is too much water, the rocks are exceedingly hard, the soil is very hilly, and the climate is deadly. Now, to thus act after the same fashion under such different circumstances is to try and do violence to nature instead of aiding it, which is the principal purpose of the art of engineering; and in the present case, when the cost is really doubled, we might very well go beyond the limits of what is possible."

But in spite of the reluctance with which Messrs. Wyse and Reclus modified their project with a tunnel, it was necessary to yield to the whims of M. de Lesseps who insisted that the canal should have no tunnel, and that a deep cutting should be made in the Culebra mountains, so as to render the canal an open-air one.
They therefore presented on May 22 an entirely new scheme for a tide-level canal costing 427,000,000 francs.

The report of the sub-committee under M. Cotard had established the prices for the units of work. Under such prices the scheme of the tide-level Panama Canal, such as is now being carried out, was estimated at 1,044,000,000 francs., including:

<table>
<thead>
<tr>
<th>Description</th>
<th>Francs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Damming the Chagres</td>
<td>25,000,000</td>
</tr>
<tr>
<td>Rectifying it</td>
<td>17,000,000</td>
</tr>
<tr>
<td>25 per cent. on 612,300,000 francs. for contingencies</td>
<td>153,075,000</td>
</tr>
<tr>
<td>Administration and banking, 5 per cent. on 765,375,000 francs.</td>
<td>38,268,000</td>
</tr>
<tr>
<td>3 per cent. interest on capital for twelve years</td>
<td>241,000,000</td>
</tr>
</tbody>
</table>

But the sub-committee in making out that estimate added that the "execution of such works, and principally that of such deep cuts, the stability of which is problematical, as well as the operations relating to the course of the River Chagres, constitute a complication of difficulties that it is impossible to estimate."

(Compte Rendu, page 311.)

M. Dauzats, whose opinion otherwise has no value whatever, attempted to impeach the figures given by the sub-committee of the Congress convened by M. de Lesseps. He remarked that in 1864 and 1865, when "those eminent engineers, Messrs. Lavalley and Couvreux undertook the work of the Suez Canal, there was only, out of 75,000,000 of cubic metres, which was the total to be done, about one-third that was ready; 56,000,000 of metres were done in three years, and 34,000,000 of them were excavated in the last nineteen months."
M. Lavalley himself was present, and he immediately replied as follows:—

"M. Dauzats has endeavoured to establish a comparison between the time that was spent in the construction of the Suez Canal and the estimate made for the present project. Messrs. Lavalley and Couvreux excavated from 70,000,000 to 75,000,000 of cubic metres in five years and a half; but one should not forget that all the installation had been already made, the bed of the canal all cleared and partly open, and, besides, there was a considerable amount of material in hand. Then you cannot compare the soil of Suez to the 50,000,000 of cubic metres of the American hard rock. The estimate of twelve years is indeed a minimum." (Compte Rendu, pages 325 and 567.)

It should not be forgotten that M. Lavalley was taking M. Wyse's basis of 50,000,000 cubic metres. What would he not have said if he then knew that, as M. de Lesseps admits now, there are 125,000,000?

As M. Lavalley spoke the words that we have quoted, a member of the Congress rose and suggested that a calculation should be made of the cube of the whole excavation to be made. "I think," he continued, "that the twelve years will be found totally insufficient by the engineers who will study the question thoroughly. We have here persons of the greatest competence, like M. Favre, for instance, who worked wonders in the St. Gothard tunnel: he might enlighten us as to the means of execution. M. Favre calculates the price for excavating hard rock in Panama at 18f., while we paid only 2.50f. in Suez, which means that in Panama the work is about eight times as dear; and yet you want to do that work in twelve years!" (Compte Rendu, page 568.)

M. de Lesseps did not answer these remarks. He
contented himself with protesting that the six years calculated for Nicaragua were too little, to which M. Lavalley answered that to him "it seemed less difficult to do the work in Nicaragua in six years than that of Panama in twelve."

Later on, we find the same gentleman stating that "when the company is formed it must make its budget. I entreat it to depend upon it that in the three first years it will do nothing, and that when it does begin to work it will have been paying three years' interest for the capital." (Compte Rendu, p. 570.)

Of course, that is exactly what has come to pass; nor was it necessary to be a M. Lavalley, a practical man, the contractor-general of the Suez Canal, to perceive that. If M. de Lesseps had not already pledged his name to Panama, he would have said precisely the same thing.

But returning to the cost of the tide-level canal, we must say in justice to the sub-committee of the technical committee that it was forced to give an estimate on insufficient data. The matter was also ventilated at the plenary committee and then at the plenary Congress, and even there, where M. de Lesseps had a compact majority, the whole truth did not fail to appear.

The great cost of a tide-level plan, with its deep cuttings, was brought to the notice of the full committee by M. Ruelle after the passing of the resolution selecting the Panama route; and when the chairman proposed another resolution endorsing the sea-level plan, M. Ruelle submitted the following significant amendment:

"The technical committee recommend, as preferable, a sea-level canal, if its execution be not found too difficult."

There followed a very lively discussion, which is not reported in full in the stenographic Compte Rendu of the meeting. But even M. Larousse (an intimate friend
of M. de Lesseps) remarked that if the cost were not heeded by the technical committee, how could this committee be justified in "recommending the canal that would cost dearer than any other?"

At the evening meeting on May 20 a desultory discussion was going on about little details of the construction, when M. Cotard, formerly an engineer of the Suez Canal, stated the gist of the whole difficulty in the following terms:—"The creation of the interoceanic canal should above all be a profitable undertaking. The expenses should be productive. The question is not to find out whether in theory it is better to have a canal which is sea-level, or one with locks or tunnels. There is only one way to think about this matter: a sea-level canal would be preferable, but the question is—how much would it cost, and how long would it take to build it? The cost and length of time in the construction are the two essential points which we should investigate here. We are dealing with hundreds of millions. We ought to know what we are going to undertake, and we should be able to come within 50,000,000f. of the money to be spent, and within two years of the time required; or else it would be better for us to adjourn our congress and then come back again." (Compte Rendu, p. 257.)

But, as we said, per fas et nefas, the Lesseps clique was bound to have a sea-level canal, and the Congress made an estimate for it of 1,044,000,000f., with the noted reservation that it could not be accurate because of the "unknown" of the Chagres.

Such figure, low as it is, was nevertheless a blow to M. de Lesseps. The programme was to select Panama, a tide-level canal, and 600,000,000f. or 700,000,000f. as the outside cost. M. de Lesseps failed in the latter. M. Wyse, without loss of time, began to correct his
own estimate once more, according, he said, to the same basis as the sub-committee, and by a stroke of the pen he put it down at 780,000,000, including 50 per cent. for contingent, banking, and administrative expenses.

M. de Lesseps now appealed to the public, but the public failed to bring him funds. The true impression prevailed, that the estimate of the cost of the work was a myth, as the ground had not been properly surveyed, and, moreover, that the United States Government was bound sooner or later to offer strenuous opposition to the building of the canal.

M. de Lesseps then took with him to Panama the "International Technical Commission," of which worthy organization we have already written. The commission was employed to say that the Chagres was "all right," and that the work was even easier than thought of at first. It was also to furnish a new estimate.

In the next chapter we will show the development of the transaction.
CHAPTER VIII.


The so-called "International Technical Commission," which M. de Lesseps took with him to the isthmus, decided that the whole work could be done in eight years instead of twelve, as estimated by the Congress, and made the following calculation of the work itself and its cost:—

Excavation.

<table>
<thead>
<tr>
<th></th>
<th>Cubic metres.</th>
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</thead>
<tbody>
<tr>
<td>1. Under water</td>
<td></td>
</tr>
<tr>
<td>Soft soil</td>
<td>12,105,000</td>
</tr>
<tr>
<td>Hard soil</td>
<td>300,000</td>
</tr>
<tr>
<td>Hard rock</td>
<td>6,786,000</td>
</tr>
</tbody>
</table>

| 2. Above water |               |
| Soft soil      | 27,350,000    |
| Hard soil      | 825,000       |
| Hard rock      | 27,734,000    |

|               |               |
| Total         | 75,100,000    |

Cost.

<table>
<thead>
<tr>
<th></th>
<th>Francs.</th>
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</thead>
<tbody>
<tr>
<td>1. Excavations</td>
<td>570,000,000</td>
</tr>
<tr>
<td>2. Damming the Chagres</td>
<td>100,000,000</td>
</tr>
<tr>
<td>3. Canalization of rivers</td>
<td>75,000,000</td>
</tr>
<tr>
<td>4. Tide lock</td>
<td>12,000,000</td>
</tr>
<tr>
<td>5. Breakwater in Aspinwall</td>
<td>10,000,000</td>
</tr>
</tbody>
</table>

|               | 767,000,000   |
| 10 per cent. for contingencies | 76,700,000   |

|               | 843,700,000   |
| Total cost    |               |

That sum is equivalent to £33,748,000.
ESTIMATES OF COST OF THE CANAL. 93

Now in this estimate no provision whatever was made—(1) for banking expenses nor for administration expenses during the supposed eight years of construction; (2) for interest on capital during the same period; (3) for rebate in the issue of obligations, nor for the preliminary expenses, price of the concession to be paid to the Société Civile, and cash to be handed over to the Colombian Government.

M. Wyse, the author of the project, had calculated the cost, excluding the above items, at 427,000,000f., which was, it will be seen, almost precisely one-half of the price estimated by the "technical commission" got together by the transferee of M. Wyse's concession.

The International Congress, as we showed in the previous article, fixed the expenses at 1,044,000,000f., including interest during construction and administrative expenses, and in this connection it is interesting to see how the two estimates—those of the congress and of the commission—differed. It is enough to present side by side the figures, as we do below:

<table>
<thead>
<tr>
<th></th>
<th>Congress.</th>
<th>Commission.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cubic metres</td>
<td>46,150,000</td>
<td>75,000,000</td>
</tr>
<tr>
<td>Total ditto soft soil</td>
<td>17,300,000</td>
<td>39,455,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;           &quot; hard soil</td>
<td>5,650,000</td>
<td>1,025,000</td>
</tr>
<tr>
<td>&quot;           &quot; solid rock.</td>
<td>23,200,000</td>
<td>34,520,000</td>
</tr>
<tr>
<td>Cost of excavations—f.</td>
<td>506,300,000</td>
<td>570,000,000</td>
</tr>
<tr>
<td>Damming the Chagres—f.</td>
<td>25,000,000</td>
<td>100,000,000</td>
</tr>
<tr>
<td>Rectifying rivers—f.</td>
<td>17,000,000</td>
<td>75,000,000</td>
</tr>
<tr>
<td>Tide locks and improvements</td>
<td>23,000,000</td>
<td>12,000,000</td>
</tr>
<tr>
<td>in Panama—f.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingencies</td>
<td>25 per cent.</td>
<td>10 per cent.</td>
</tr>
<tr>
<td>Total expenses, without interest, administration, banking, &amp;c.—f.</td>
<td>765,375,000</td>
<td>843,700,000</td>
</tr>
<tr>
<td>Basis for prices per c. m.—f.</td>
<td>2.50, 5, 7, 13, 18 same.</td>
<td></td>
</tr>
</tbody>
</table>
Now, this comparison is most interesting. M. Dauzats, a blind unreasoning follower of M. de Lesseps, burst forth in indignation at the Congress against the "omissions and exaggerations" of the technical committee, which had prepared the estimates (Compte Rendu, page 321). He scolded the committee for exaggerating the cubic contents of the cuttings to be made in the hard-rock section, and went so far as to say that the committee did not know enough to allow for the unevenness of the Culebra's summit (ibid. page 323). Our readers will now be interested in learning that this same Dauzats was one of the master-minds that signed the report of the technical commission which in a few days found at the isthmus that there were 75,000,000 metres instead of 46,000,000 to excavate, and that of hard rock alone the technical committee of the Congress, taking Wyse's estimate (and not its own), had put down 23,200,000 cubic metres, while Dauzats' own commission found not less than 34,520,000 cubic metres.

Leaving aside M. Dauzats' criticism, and rather praising him for having the manliness to sign a report by which the cost of the Panama Canal (deducting interest, &c.) is higher than the estimate against which he had warmly protested but a few months before, we will call attention to the following remarks:

1. The Panama route was selected in view of the imaginary surveys of Messrs. Wyse and Reclus, which are at once found to be totally inaccurate. In the canal scheme there were two main things to be considered (once admitted the feasibility of a sea-level canal)—viz., the cube to be excavated and the possibility of solving the Chagres problem, and the expense connected with it. Now, in both those essential things M. Wyse's plan was worthless and baseless. He estimated 46,000,000 cubic
ESTIMATES OF COST OF THE CANAL.

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metres; his own Congress, with no technical data sufficiently comprehensive, was obliged to take the same number; but a few months later the more than friendly commission of his own men found 75,000,000. As to the Chagres, the commission found, "after the special studies of M. Dauzats," that the stemming of that torrent was to be done by the construction of a dam and subsidiary channels. What the opinion of Dauzats is worth we have already seen; but as to the price of these works of diverting the Chagres and regulating its flow, while the Congress had estimated it at 42,000,000f., the commission now put it down at 175,000,000f. M. de Lesseps' own commission therefore found—(a) that there was 63 per cent. more excavation to be made than M. Wyse had calculated; (b) that the Chagres would cost 400 per cent. more than was estimated by the Congress.

2. The second observation which we wish to make regards the estimate of contingent expenses. The Congress had put down 25 per cent. for contingencies; but the commission, which had just now more than quadrupled the price of the Chagres improvement as estimated before, was content with a meagre 10 per cent. The United States technical committee, appointed by the Government to revise the estimates for the different schemes of an interoceanic canal, added 100 per cent. to all for contingencies and expenses not foreseen. The friendly Congress selected by M. de Lesseps added only 25 per cent. for that purpose on the estimates; and now M. de Lesseps' commission, while finding that the Congress had greatly underestimated the cube of the excavations to be made, as well as the expense with the Chagres, put down only 10 per cent. This tells its own story as to the utter partiality, incompetence, and carelessness of such a commission.
But we will now revise the Congress estimate of the total cost of the canal according to the commission's own findings, such as they were:—

Prime cost, without unforeseen expenses, as per commission... 767,000,000 Francs.

To be added:—

1. Unforeseen expenses, same low percentage adopted by M. de Lesseps' Congress—viz., 25 per cent... 191,150,000

958,150,000

2. For expenses of banking and administration, same as adopted by M. de Lesseps' Congress—viz., 5 per cent... 47,907,500

1,006,057,500

3. Interest during construction (twelve years, as adopted by M. de Lesseps' Congress), 30 per cent. for the twelve years, as also adopted... 301,817,200

1,307,874,700

That is the estimate, not our own, but which the Congress of 1879 would have made if M. de Lesseps had presented it with the results of even some commission like his own, which in 1880 spent forty days at the isthmus. Every one can see why it did not occur to him to send such a commission before the assembling of the Congress, in order that the Congress, which was to decide that his own route was the best, might at least estimate on a somewhat more approximate number of cubic
ESTIMATES OF COST OF THE CANAL.

metres, and with a clearer idea of the tremendous unsolved problem of the Chagres. Forty days run fast enough, and M. de Lesseps, if he wanted to find out the real truth about the Panama Canal, would have done what any careful contractor does everywhere: he would have sent his own reliable engineers to see whether he could honestly give his name to the enterprise. If a contractor gives his time and prestige to any raw scheme such as the Wyse-Reclus, it is because his own profits are secured beforehand, or it is because his own excessive vanity is engaged in it, without regard to the success of the enterprise and to the losses of the multitude who contribute their savings to what they suppose to be a perfectly legitimate undertaking.

The Congress, while estimating the cost at $1,044,000,000, stated that it had had no sufficient information on the matter. We therefore blame the Congress for having given an estimate at all. However, in justice to its sub-technical committee, we should not forget that it declared in the most solemn manner that it had not data enough on which to base a reliable estimate.

But we repeat, if the Congress had had before it at least the more than perfunctory figures of M. de Lesseps' own commission, representing the 75,000,000 instead of the 46,000,000 cubic metres which it was obliged to assume from Wyse's report, the Congress would have had to estimate the cost of the Panama Canal at $1,307,874,000.

Now we shall proceed to show that this total is altogether inadequate, and such an estimate too low—too friendly to the promoters of the Congress and of the Panama scheme. Let us take up each item.

1. The prime cost, as given by the commission in
which Dauzats was a brilliant light, comprehends only 75,000,000 cubic metres, of which 34,500,000 were in solid rock. Now, at the last annual meeting of the company, in July 1884, M. de Lesseps admitted that there was at that date 120,000,000 cubic metres of excavations to be made, including the work of deviating the Chagres, and the company had already, in May 1884, taken away, according to the same report, 5,243,302 cubic metres. If therefore we take 125,000,000 of cubic metres, we shall not err on the side of any attempt to exaggerate the total number. On the contrary, if M. de Lesseps, having first accepted 46,000,000, then 75,000,000, now accepts 125,000,000 as the correct figure when the real work is barely commenced, we may take as most certain that we shall soon see the last sum considerably raised.

What, then, we assert firstly is, that if the technical committee had had before it the scanty facts even at this moment collected, it would have had to base its estimate on 125,000,000 instead of 46,000,000 or 75,000,000 cubic metres. To the above estimate let us therefore add the difference between the cost of 75,000,000 and 125,000,000; that is to say, let us add two-thirds to the cost of excavation, assuming that the material to be excavated is kept up in the same proportion of soft and hard soil and hard rock. The commission of 1880 estimated the cost of 75,000,000 at 570,000,000f. This total should in our corrected estimate read 570 plus two-thirds—equal to 950,000,000f.

2. We have now the item of unforeseen expenses. The Lesseps Congress fixed the percentage at 25 per cent.; the Lesseps commission, nine months later, fixed it at 10 per cent.; M. de Lesseps himself, a few days after the latter estimate, reduced it to 5 per cent. By and bye, if we wait long enough, we shall see the item disappear-
ing, and per contra we shall have a gradual cropping up of something like unforeseen gains. We need not say that all this way of handling figures, to the manifest disadvantage of the public, is in keeping with the spirit which has presided over this scheme of the Panama Canal.

The celebrated commission, as we have seen, had to more than quadruple the estimated price of the works of the River Chagres; it found that 75,000,000 metres instead of 46,000,000 had to be excavated, and yet the commission reduces the item of unforeseen and contingent expenses from 25 to 10 per cent. "Yes," it may be said, "but now that the ground had been carefully looked over, there were fewer contingencies to expect." But this we emphatically deny. The commission was a humbug. It was pledged beforehand to M. de Lesseps, who owned the concession, and who had been unsuccessful in launching his company on the ground that the line had not been sufficiently studied. Besides, except as regards two of its members, the commission was thoroughly unreliable, as the French ought to know by looking over the names of the young men who composed it.

But, as if that unjustifiable reduction were not enough, M. de Lesseps, by an ukase of his pen, decided that even 10 per cent. was too much, and made it 5 per cent. Our readers will not be astonished to hear that even to this day the great financial diplomatist affirms that the canal will cost only the original sum that he made up soon after the so-called report of his "commission" was presented to him. That is to say, he is still putting down 5 per cent. for unforeseen expenses, while, instead of 46,000,000 and 75,000,000 cubic metres, he admits that there are 125,000,000!

The 25 per cent. allowed by the Congress seems to us
to be hardly sufficient. The Suez Canal, comparatively easy of construction, and properly surveyed, cost $457,000,000. instead of the estimated $200,000,000. Here there was an increase of 128\% per cent. over and beyond the original estimate.

The United States Government Committee, who examined and revised the isthmus explorations and estimates, made (be it remembered) by the most competent officers, some of whom spent years in the isthmus, added 100 per cent. to all estimates. This is what a careful contractor should do in dealing with a work of such magnitude in such an inhospitable country, so far from Europe, and having to deal with problems, such as the damming of the Chagres, which have never been properly studied.

Not wishing, however, to be taxed as exaggerating any estimate that should have been made by any set of careful engineers, we will put down as unforeseen and contingent expenses 25 per cent. only. The Chagres problem is still unsolved. Nobody knows what is to become of the work that may be done if there should be two heavy freshets during the construction of the proposed dam. Nobody knows what is to become of the canal between Aspinwall and Gatun if (as is assumed by all competent authorities) the swampy land will again flow into the canal. There are thousands of contingencies in such immense undertakings; 25 per cent. is less than one-fifth of the percentage of unforeseen expenses that befell the Suez Canal. We, in short, will correct the estimate of the commission by writing 25 per cent. instead of 10 per cent.

3. The Congress allowed 5 per cent. for banking and administrative expenses. That was meant to cover administration in France and Panama, and banking com-
missions, which include the discount offered on securities of the company. Such sum amounted in the Congress' estimate to a little over 38,000,000£. Now, that sum was wholly inadequate, and there is no difficulty in proving it to be so.

Looking over the inventaire général of the year ending June 30, 1883, and furnished to the shareholders at their last general meeting, on June 19, 1884 (these inventaires, or balance-sheets, are always produced twelve months after the expiration of each fiscal year of the company), we find the following items:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration in France and Panama</td>
<td>6,182,707</td>
</tr>
<tr>
<td>Comité Américain</td>
<td>1,500,000</td>
</tr>
<tr>
<td>Various expenses for the service of the securities</td>
<td>8,089,103</td>
</tr>
<tr>
<td>of the company</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15,771,810</td>
</tr>
</tbody>
</table>

Now, it must be remembered that the company has only begun to get money for its needs. But even if that amount of 15,000,000£ per annum should not be exceeded for ten or twelve years, it is clear that the sum fixed upon by the Congress is ridiculously small, for it would not cover the expenses for three years.

The Panama Canal Company at its very start spent £904,000 before it ordered a pickaxe. That sum comprehended the following expenses:

(a) The first issue of 1879, which was unsuccessful.

(b) The cost of M. de Lesseps' travels to the isthmus, with his "commission," and the fees and percentages given to the "propagateurs," or promoters, in France and abroad.

These two items amounted alone to 10,801,577.59£ or say £432,000.
Besides that, the company paid 11,800,000f. as (we translate from the official report) "a remuneration stipulated to be delivered to the members of the International Syndicate which had advanced the necessary funds before the constitution of the company." That is equivalent to £472,000; making altogether, as we have stated, £904,000, or 22,600,000f., of which 2,000,000f. were paid to M. de Lesseps and the other fondateurs. That does not include, however, the 5,000,000f. in cash nor the 5,000,000f. in paid-up shares which were handed over to M. Wyse and his société civile as part of the price of the concession.

So that the company started with an outlay of 32,600,000f., or £1,304,000. But that is not all. M. de Lesseps, in order to stifle opposition in the United States, created in New York a huge fund, and placed at the head of it an ex-Minister of the Navy, Mr. Thompson, thereby compromising the company to the extent of 12,000,000f., payable thus: 3,100,000f. at once, 1,400,000f. one year after the formation of the company, and 1,500,000f. for each of the five following years. These 12,000,000f., together with the 32,600,000f., make 44,600,000f., or £1,784,000—not a small liability to start with. According to the balance-sheet for June 1881—only four months after the formation of the company—the sum of 40,444,000f. had been spent, of which only 1,032,900f. in "work." The administration in France and Panama had already cost 1,306,972f., or £52,240.

But as if all those expenses with syndicates, promoters, and administration were not enough, the rebate on the company's securities that have been issued forms a tremendous liability.

The Panama Canal Company has made the following issues:
ESTIMATES OF COST OF THE CANAL.

Sept. 1882 . 125,000,000f. discount . 16,425,000f.
Oct. 1883 . 300,000,000f. " . 120,000,000f.

Total capital 618,692,500f. " . 201,118,295f.

Therefore, if in the corrected estimate, as it should have read at the time, we place 30 per cent. of the cost for preliminary expenses, including the concession for syndicates, for the New York Corruption Fund, for rebates on issues of bonds, for administration in Paris, for hospital and administration in Panama, we shall not have exaggerated the true facts.

4. We have now to consider the interest during construction. Let us admit the hypothesis, that no insuperable difficulties had been anticipated at the time of making a proper estimate, and that the company had been thought capable of executing nothing less than 20,000,000 cubic metres of excavation each year, against 7,600,000, which is all that it did from June 1884 to May 1885; as the total amount excavated to May was about 12,500,000, there are still left to be excavated 112,500,000 cubic metres, according to M. de Lesseps' own statements, in which we place no confidence, for, we once more repeat, he first mentioned 46,000,000, then 75,000,000, and now 125,000,000 cubic metres. But even the 112,500,000 cubic metres will take say six years from last April, which is just ten years from the establishment of the company. The best possible showing would have been to reckon the interest during construction for ten years at the average rate of 4 per cent. on sums spent. In fact, the company is paying 30,497,740f. a year on the sum of 768,693,500f. that has been raised, which is about 4 per cent. Adding a half per cent. more for amortization, we shall have 4½ per cent. to charge.
On the sums already raised the Panama Canal Company will have paid in 1891 about 300,000,000 of interest and sinking fund. The present estimate of the total cost of the canal works comes to 2,364,000,000, more than 200 per cent. beyond what has already been raised. Even supposing that the company should raise the remaining 1,600,000,000 so as to pay the 4½ per cent. charge only for the average of three years on the whole sum, we should have to add 216,000,000 to the item of interest and amortization during construction, making altogether 516,000,000, or, if we deduct counter-interest on dormant capital, say 500,000,000.

Let it be borne in mind that we have not taken into account the compound interest on the money raised to pay interest with, which involves a tremendous outlay.

Now that we have collated all the elements for our calculation, we will present here, not our own estimate, but the estimate that the Paris Congress should have made if it had even the scanty facts arrived at after a few months' study by M. de Lesseps.

**Estimate of cost of the Panama Canal, such as should have been made by the Congress of 1879.**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excavation</td>
<td>125,000,000 cubic metres (number admitted by the company)</td>
</tr>
<tr>
<td>Damming Chagres and canalizing the river (according to M. de Lesseps' Technical Commission of 1880)</td>
<td>175,000,000</td>
</tr>
<tr>
<td>Tide lock in Panama end (ditto)</td>
<td>12,000,000</td>
</tr>
<tr>
<td>Breakwater in Aspinwall (ditto)</td>
<td>10,000,000</td>
</tr>
<tr>
<td><strong>Carry forward</strong></td>
<td><strong>1,147,000,000</strong></td>
</tr>
</tbody>
</table>
Estimates of Cost of the Canal.

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Brought forward 1,147,000,000

5. Unforeseen expenses, 25 per cent. (The Lesseps Congress in 1879 fixed 25 per cent., the Commission of 1880 only 10 per cent.; the United States Government Commission fixed for the different projects 100 per cent. The Suez Canal cost 128½ per cent. more than estimated.) We leave for Panama 25 per cent., or . . . . . . . . . 286,750,000

6. Administration, banking, cost of concession, preliminary expenses, discount on bonds, &c., 30 per cent, say 430,250,000

1,433,750,000

7. Interest and sinking fund during construction . . . . . . . . . 500,000,000

Total . . . . . . . 2,364,000,000

Such should have been the estimate of the cost of the Panama Canal, taking for granted that—

1. It might be completed in ten years from the commencement of the company;

2. That there were only 125,000,000 cubic metres of excavations as the basis of the present calculation;

3. That the "unknown" problem of the Chagres can be dealt with properly—a problem which is as unsolved at this day as it was when the sub-committee of the Congress of 1879 stated that nothing was known about it.

If, then, that Congress had known that there were
the 125,000,000 cubic metres at present admitted, and if it had taken into proper consideration the expenses with price of concession, administration, banking, financing and interest during construction,—it would have estimated the cost of the canal, not at 1,044,000,000, but 2,364,000,000, or £94,560,000, instead of £41,760,000. We will show hereafter that even that sum is inadequate, to judge from facts as ascertained at present.
CHAPTER IX.

DEFINITIVE ORGANIZATION OF THE COMPANY—THE WORK FOR THE FIRST TWO YEARS.

M. de Lesseps exults over his success.—First general meeting of the shareholders.—Preliminary expenses, amounting to £1,800,000, provided for.—The founders', banking, and other commissions.—A singular "Comité Américain."—M. de Lesseps' programme of operations for 1881–2 and 1882–3.—Death of MM. Bionne and Blanchet.—M. de Lesseps fails to keep his promises: the "installations" only commenced, not finished.—The general meeting of the company in 1882; comparing promises with facts.—M. Dingler, a new director-general of construction.—The work by contract; great delays, but always new reassurances.

It cannot be denied that M. de Lesseps' great financial success produced an excellent effect abroad. If the hero of the Suez Canal could raise money so easily without any studies, every one began to ask whether the Panama Canal was an undertaking so difficult as had been represented. Of course M. de Lesseps took advantage of that state of doubt to assert more positively than ever that he could do the work easily in six or seven years, and at a cost of not more than 600,000,000f.; and the majority of the 102,000 subscribers believed it. The Lesseps party became so infatuated that the Journal des Débats in January 1881, a few days after the allotments, referred to M. Menocal, the celebrated explorer of Nicaragua and Panama, as "un jeune ingénieur American qui affirme avoir fait des études. . . . Il est permis de croire . . . qu'il réussirait à faire un escalier en spirale mais jamais
un canal." This reference to the United States engineer, whose work on the isthmus Wyse had declared to be indispensable to all who have any studies to make on it, and whose Nicaragua project was the nightmare of the Lesseps party, illustrates to what a pitch of infamy triumph in a bad and desperate cause is capable.

The first general meeting of the company was held on January 31, 1881. M. de Lesseps presented a report, the greater and more prominent part of which is taken up with the Suez Canal, and then with a succinct review of the formation of his new company. "All problems have been solved," he says, "and all difficulties smoothed over." The opposition in America had been quashed by the formation of a committee in virtue of the following agreement:—

"The comité shall represent in the United States of America the interests of the company in everything that concerns the observance of the neutrality of the canal as defined in Art. V. of the law of the United States of Colombia, granting the concession for the said canal; and, moreover, the comité shall represent the company in any other matter for which the company, through the Board of Administration, may request its co-operation, not only during the construction, but also during the working of the canal."

M. de Lesseps then says that the general meeting was now to appoint commissioners, who, according to law, were to appraise the value of the concession, and also to examine and report upon the preliminary expenses which were to be defrayed, and finally to fix the amount to be paid yearly to the board of directors, according to Art. XXVIII. of the statutes of the company. M. de Lesseps, in explaining the nature of these expenses, says that instead of allowing the American and European
financiers 40f. to 50f. in each share issued, and thus issue the shares at a premium, he preferred to offer these at par, having arranged beforehand with the financiers for the remuneration due them. He boasts that such expenses did not exceed $\frac{5}{2}$ per cent. on the "capital d'exécution," that is to say, on the whole capital of 600,000,000f. As only 290,000,000f. were offered, that $\frac{5}{2}$ per cent. really meant 11 per cent. on the subscriptions! That is the outlay of which M. de Lesseps said:—"Les commissionaires que vous allez nommer vous diront sans doute combien la dépense est modeste."

On March 3, 1881, the second general meeting of the company took place, and, according to law, the company now became definitely organized. M. de Lesseps read another report, beginning by congratulating himself for the "energy" displayed at the first meeting, "energy which moved everybody profoundly"—whatever that might mean. Speaking of the intentions of the directors, he begins by saying that "the problem of the American isthmus is comparatively easy"—much easier than that of the Suez Canal. "It is an operation the exact mathematics of which are perfectly well known, and the grandeur of the effort to be made does not at all trouble the enterprising contractors to whom you will supply the means of carrying out the effort."

The contractors alluded to are Messrs. Couvreux and Hersent, and if our readers take into consideration that the said contractors to this day have never entered into any firm contract at all with the Panama Canal Company, they will be better able to appreciate the assurance of M. de Lesseps. They had merely said that the work could be done for 518,000,000f.

The report goes on to refer to the "International Technical Commission" of 1880, which was composed
"of the most competent engineers." That Commission came to the conclusion that the damming of the Chagres was "a very simple solution of the only doubtful question about the execution of the work of opening the canal." He then says that the total number of cubic metres to be excavated is 72,986,000, of which 44,536,000 in alluvious and semi-hard soil, and 28,450,000 in hard rock.

The canal proper, M. de Lesseps adds, will cost 430,000,000f., including the side channels to dispose of the waters of the Chagres and of the Rio Grande. The other expenses with the canal, such as the "barrage" of the Chagres, the culverts from the artificial lake, the improvements of the ports, will come to 46,000,000f., and the tide-lock, lighthouses, reservoirs, &c., will amount to 36,000,000f. more; thus making a total for all works of 512,000,000f., or £20,480,000.

The programme for the year (1881) was to clear the line of the canal from vegetation, to study the hydrography of Colon and Panama bays, their tides, currents, winds, &c.; to build houses for the accommodation of employés and hospitals for the sick; to select localities, and to mount the workyards and seats for the different sections. "In about October, all preliminary work being finished (toutes les installations étant terminées), the great deep cutting at Culebra will be attacked, while towards the end of the year, in November or December, the first dredges will begin excavating the soft soil in the lower part of the line, and in Colon or Aspinwall a sea-dredge will be at work. Thus in January 1882 the work will be going on in several points of the canal; and the experience acquired by a few months' work will enable the company to order the whole of the needed machinery with full knowledge of its usefulness; and before the
end of 1882 the whole definitive material will be in the isthmus, and in 1888 the canal will be inaugurated."

Such were the promises of the promoter, and his endorsement of the "Technical Commission" of whose composition and work our readers have already got the true inside view. We beg them to bear in mind what were the promises of M. de Lesseps, and also to satisfy themselves whether, from the studies made at the isthmus, M. de Lesseps was justified in making those bold promises to his shareholders. After the reading of that report the commissioners appointed in the previous meeting presented their own report on the several matters submitted to them.

"Your company," they said, "has been formed in the first instance by persons who have made advances of money (a thing thought at the time to be very risky) necessary to the preparations for its constitution; and in the second place by those who, under another form, lent to M. de Lesseps the aid without which it would have been impossible for him to bring the whole business to a happy conclusion." These founders, besides 2,000,000 francs in cash, will have 15 per cent. of the net profits of the enterprise. The directors will have 3 per cent. of such profits, but while the profits are not declared, they will have 240,000 francs (£9,600) per annum as fees.

As to the "expenses which M. Ferdinand de Lesseps has been forced to incur, in order to arrive at the formation of your company," the commissioners reported as follows:

"In the first place, there are the expenses for the first issue made in 1879; for the propaganda which preceded the formation of the syndicate of that subscription; the outlay made on account of the different expeditions sent to the isthmus; and finally, the expense with the recent
issue of 590,000 shares, including placarding, advertising, postage, the transportation and the centralizing of funds, the expenses with the *personnel*, as well as all commissions due to the bankers, intermediaries, and promoters, not only in France but abroad. The total under this head amounts to 10,801,577f. 59c., which represents 1.80 per cent. of the total capital necessary for building the canal.

"To that sum . . . . we must add the remuneration stipulated as profit for the members of the international syndicate which was kind enough to make advances of considerable funds necessary for the formation of your company—sums which would have been lost by them had the public failed to respond to their appeal. That remuneration amounts to 11,800,000f. . . . .

"There is still an agreement made with the American financial group which has charged itself with the task of representing the company's interest in the United States. . . . . Such agreement brings us a liability of six annual payments, as follows:—3,100,000f. soon after the organization of the company; 1,400,000f. payable one year after; and five payments of 1,500,000f. at the end of each of the five following years. Such expenses should appear in your annual budgets."

Such was the report of the first finance committee of the Panama Canal Company. The poor 16,000 women and other shareholders were called upon, not only to pay £400,000 for the concession, but also to defray the expenses of the first fiasco of M. de Lesseps and the "propaganda that preceded" it—that is to say, the "International Congress," the lecturing tour of M. de Lesseps, the bribing of newspapers, the "technical commission" and travels of M. de Lesseps to the isthmus and to America, and commissions due to intermediaries of all classes. Then besides that there were commissions
due to the "international syndicate," greedy and useless middle-men. As to the American syndicate, it is one of the most shameful corruption funds ever recorded in the history of financial enterprises. Imagine this expenditure of £480,000, so that a few men in New York might represent the company in America and co-operate with it when requested! To that fund is due the success which attended M. de Lesseps' invitation to the then Secretary of the Navy of the United States to accept the presidency of the syndicate, and no respectable bankers should ever have participated in that costly fraud upon the shareholders of the Panama Canal Company as three firms in New York did. These men are challenged to show that they ever did anything for the company except lend their names, so that here in Europe M. de Lesseps might say that "America was all right." The three houses deserve the hearty reprobation that will be visited some day upon all who have intrigued and plotted to obtain the money from the poor French people. The corruption fund is in New York still: it is doing its work of bribery and of systematic chicanery; and the Americans, who are considered so shrewd, whose press claims to throw light on all the dark corners of finance, have been bearing this insult to their good sense with singular equanimity.

Imagine now a company in England formed on the basis of the Panama Canal, paying £904,000 for preliminary expenses, besides £480,000 for an American corruption fund—altogether, £1,384,000, not including £400,000 for the concession! The total amount called on the shares up to this time had been £5,000,000, and yet out of that sum nearly £1,800,000, or 30 per cent., was spent at once on, or set aside for, the concession and preliminary expenses!
In a small enterprise requiring little capital, 7½ per cent. of the latter is not too great a proportion for the preliminary expenses; but in an undertaking said to cost £24,000,000, that percentage is enormous, especially when the result of the Panama Canal construction is so problematical, and when no proper care had been taken to make it less problematical.

But we must take leave of this first accounting of M. de Lesseps' enterprise, and follow up the history of his company. The programme that he announced, we repeat, was:

In October 1881 all preparations for work were to be completed;

In December 1881 work to be commenced all along the canal, including the hard-rock mountain of Culebra;

During 1882, obtaining all the necessary machinery according to the experience acquired in the latter part of 1881 and first part of 1882.

Such were the promises made by the president at the general meeting on March 3, 1881.

The month of October came very quickly, and except the despatching of 200 or 300 Europeans and some machinery to the isthmus, but little was done. In the isthmus the fever raged as violently as ever, in spite of the daily assurances in Paris that the health in Panama was excellent. M. Henri Bionne, the right-hand man of M. de Lesseps, caught it, and died on board of the steamer on his way to New York. Later on, M. Gaston Blanchet, the engineer of Messrs. Couvreux and Hersent, and a most excellent man, died also of the Chagres fever, while surveying the Upper Chagres.

As to work, the line of the proposed canal was cleared,
some soundings were made, while special hydrographic studies were carried out at both bays forming the termini. Some wooden houses were put up along the line, and some machinery arrived. October had come, and M. de Lesseps had failed to complete the work with the first establishment which in March he had so confidently promised to do. Anybody can see from the detailed diary of operations, published in No. 51 of the Bulletin du Canal that the "installation" and the studies were only commenced! We do not say that these six months were thrown away, but we only wish to remark that M. de Lesseps has always been promising much more than he can do. Even Dauzats—the great Dauzats—in a report to the Consulting Technical Committee dated November 23, stated that "the studies were not ended," while only "a great part" of the arrangements necessary for the lodging of the employés and workmen "was ready."

Meanwhile M. Armand Reclus, who had been agent-general of the company in the isthmus, and who had come to Paris for a few months, returned to his post in December, in order to inaugurate what is bombastically called the "second campaign."

The programme of that "second campaign" was published in the number of the Bulletin above referred to. It was as follows:—

Continuation of indispensable studies of the levellings, and of the hydrography of Aspinwall and Panama; plans for the ports to be settled.

The definitive plans for the dam or "barrage" and for the subsidiary channels to be deeply studied and settled;

The work of excavation to begin forthwith;

In January 1882 the first sea-dredges to open a
maritime communication between Aspinwall and Gatun, following up the axis of the canal;
The excavators and dredgers were then to open the bed of the canal between Gatun and Buena Vista;
Two brigades of from 500 to 1,000 working men were to be established for that work, with intercommunication by tramway;
The massive rock section of the Emperador-Culebra was to be attacked simultaneously, so that from December 1881, when the programme was made, up to June 1882, the end of the "second campaign," 4,000,000 or 5,000,000 cubic metres should be extracted from that section alone;
A service bridge near Gamboa to be built;
Machine shops to be put up near that point;
A complete telegraph and telephonic system to be established;
All machinery to be completely ordered.

Let us now see how that magnificent programme was carried out.

At the third general meeting of the company, on June 29, 1882, M. de Lesseps presented his annual report. We might expect to see the account of the excavations: just in the Culebra section alone he had promised us from 4,000,000 to 5,000,000 cubic metres excavated until June; and that being the hardest section, we might expect to see at least as much more in the other sections.

Our readers will be surprised to learn that, instead of any such number of cubic metres of soil and rock having been excavated in June 1882, on March 1883 there were but 660,000 cubic metres removed; and on May 1, 1884, two years later on, the total cube excavated amounted to only 5,243,302 metres.

What M. de Lesseps promised in October 1881 he
knew perfectly well at the time there was no possibility of accomplishing.

We will show also how most of the other promises were equally unfulfilled. In January 1882 the sea-dredges were to open salt-water communication between Aspinwall and Gatun. In his report of June 1882 M. de Lesseps announces that many landing wharves had been put up in Aspinwall, and that the line between Gatun and Aspinwall was being cleared of vegetation, so that *in the following August* the excavations *should commence*, according to a contract with Huerne, Slaven and Co. of San Francisco. As to excavations between Gatun and Buena Vista *nothing whatever* had been done.

The studies of the damming in of the Chagres and the *barrage* at Matachin were to be completed also in June 1882. Now, M. de Lesseps announces that "we will complete in a thorough manner our studies on the *barrage* of Gamboa, the Chagres channels, and the hydrography of Panama."

Even as late as January 27, 1883, the Paris consulting technical committee, in answer to a report from the administration of the company, gave as its opinion that the problem of the *barrage* of the Chagres was *not sufficiently studied* for the committee to give its approval to certain suggestions of M. Dauzats, and it was then recommended that the new director of the works, M. Dingler, should apply himself to further studies of the problem. M. Dingler had succeeded to Commander Richier, who himself had succeeded Commander Armand Reclus at the isthmus as representative of the company.

But it may be said that if there were delays in the first year, the work progressed at a great pace in the following one. Let us hear what M. de Lesseps had to
say on July 17, 1883, when the fourth general meeting of the shareholders took place. He dilates on the manner in which the massive rock sections—Paraiso, Upper Rio Grande, Culebra, Emperador, and Obispo—were attacked "vigorously." But the total number of cubic metres that had been excavated from the beginning of the canal works until March 31, 1883—that is to say, in two years—did not exceed 659,703, out of a total of 125,000,000. The total cube excavated at those four sections was but 240,773 metres! That had been the work done in the section whence M. de Lesseps had promised to have 4,000,000 to 5,000,000 one year before. In the meantime he is, as ever, full of promises. "Workyards will be soon established near Matachin, at Gorgona, Mamei, San Pablo, Tabernilla, and Buhio Soldado." The first dredge of Messrs. Huerne, Slaven and Co. had arrived in April, and was to commence excavating the canal between Aspinwall and Gatun in June 1883. That work was to have been ready in 1882, according to M. de Lesseps' previous promise; and even after it had been resolved to do that work by contract there was a great waste of time. The contract with Huerne, Slaven and Co. for excavating six millions was signed on February 20, 1882, and that firm was to commence work in six months, or in August 1882; whereas it is stated that they only commenced to work regularly on October 8, 1883, or fourteen months later on. The complete work of excavating 9 kilometres, or about 5 2/3 miles, was to be finished in three years at most—that is to say, not later than August 1885; and yet we hear nothing at all concerning the fulfilment of that expectation.

The report also says that the workyards of Buhio Soldado, Tabernilla, and San Pablo were not ready,
whereas they were expected to be ready by the end of 1881. Those at Culebra and Emperador were much advanced. Those at Rio Grande had not been begun, for there was first a preliminary work to do with regard to deviating the course of the river.

Let the reader compare this state of affairs with that promised in June of 1881.

The report gives in detail the amount of material that was then at the isthmus, two years and a half after the formation of the company. It comprised 4 dredges, 6 boats, 18 excavators, 29 locomotives, 444 waggons for excavated soil, 10 portable steam-engines, and a few other things; not a great show, indeed, for eighteen months. However, M. de Lesseps says that orders for locomotives, waggons, &c., had been rapidly given out.

The number of workmen had been growing from 3,000 to 6,844 persons in July 1883; but in October following M. de Lesseps expected to see 15,000 men at work.

Towards the end of 1882 the company had begun to enter into contracts for excavation—a policy which is certainly to be commended, for the French alone would never do much towards pushing that work. Besides the Huerne contract already referred to, the company made an arrangement with the American Trading Company, and another with the Franco-Colombian firm of Millet, Sosa and Company of Panama, for cutting the Culebra above line 75, comprising about 3,500,000 cubic metres. That work was to be completed in thirty months after the signing of the contract. As the contract was dated November 6, 1882, the work ought to have been completed by May 6, 1885. It would be interesting to hear now that it has even been half-done.

We may hope that the contract system has been adhered to with advantage to the company, although it
seems that not a single contractor has fulfilled his obligations to the letter, everything being late in this canal enterprise.

From March to May 1883, the director, M. Dingler, a man of great talent and executive ability, signed seventeen contracts, not only for excavation, but also for the introduction of labour, 3,000 men in October following, and 2,000 before January 1884. Among the contracts for excavation we will note the following:

For cutting at Matachin, between kilometres 43 and 45 from Aspinwall, about 1,500,000 cubic metres of rock and hard soil, the work to be done in eighteen months.

For excavating, between kilometres 45 and 48, in the lower Obispo, about 2,000,000 cubic metres, within twelve months.

For excavating 1,200,000 cubic metres in Gorgona, 500,000 in Obispo, 1,400,000 in Buhio Soldado, between kilometres 23.45 and 25.90. Altogether these contracts were for 6,700,000 cubic metres in the period of eighteen months at the outside. We have no means of testing whether the contractors have carried out their obligations.

In September a contract was entered into with Wiesler and Legrot for dredging 260,000 cubic metres in La Trinidad, the work to be all done by August 1884.

Later in the same month another contract was signed with Keroman and Carcenac for 1,000,000 cubic metres near Pedro Miguel, and up to line 15 of the average tide-level of the sea, the work to be ready in eighteen months — i.e., March 1885.

Altogether these contracts represented 20,500,000 cubic metres, besides the excavations already done and to be undertaken by the company directly.
CHAPTER X.

PROSECUTION OF THE WORKS.

Preparations for the loan of 1883.—M. de Lesseps promises to increase excavations at the rate of from 2 to 5, from 5 to 10, and from 10 to 20, all within six months.—How he kept his promises; to this date the proportion is kept between 6 and 7.—The reason of the systematic misrepresentation.—The fiction of the canal being finished in 1888 and to cost but £24,000,000 steadily maintained.—Total cubic excavation up to last May.—Unreliable figuring.—M. Simonin's utterances in La France.—The general meeting of the company in 1884: fresh promises.—The Chagres problem "studied vigorously."—Still another loan.—The question heretofore quite easy.—The Chagres and the money difficulties to begin soon.

We have shown in a previous chapter how the company was definitely organized in compliance with the requirements of the French law. We have also heard what M. de Lesseps promised to accomplish in the two first seasons of work at the isthmus, and then we have shown how the execution of it fell far short of his promises. We will now see how the great financial impresario prepared himself for what he called the "campaign" of 1883-4, and what he has done since then, until May 1885, according to his own reports and official publications.

In September of 1883 M. Ferdinand de Lesseps announced that he was about to issue a three per cent. loan. It was therefore time for still larger promises; also for liberal subsidies and for nauseous puffs. We
will leave these aside, and consider only what M. de Lesseps said at the time about the "Situation d’Ensemble," or general review of the work as it was then.

The number of cubic metres excavated at that time (two years and eight months after allotment) did not exceed $1,700,000$, out of a total of $125,000,000$, or about $\frac{1}{3}$ per cent. of that total. Yet, says M. de Lesseps' official organ:

"We have now excavators and dredges and machinery all along the line of the future canal, the bed of which is being attacked by $11,000$ labourers. Last month (August 1883) the excavated cube was $210,000$ metres, which was more by $25$ per cent. than in the previous month.

"The total output is going to increase every month, and in December next" (i.e., within three months) "will attain $500,000$ cubic metres, when the dry season will have set in.

"The accumulated material and the more favourable weather will then permit us to have a total monthly output of $1,000,000$ cubic metres, which we will then increase to a normal output of $2,000,000$ a month until the canal shall have been finished in 1888."

Here we have again an example of the peculiar processes of M. de Lesseps. In August—an exceptionally good month as compared with July—the total output was $210,000$ cubic metres. He wants to raise some money, and he begins by asserting that in three months the number will be $500,000$ metres, and soon after $1,000,000$, and then $2,000,000$. His manœuvres are really astonishing. The "more favourable weather" in Panama to which he refers is December, January, and February; and what he wanted to convey to his supporters was, that although the canal company had
begun operations *two years and eight months before*, and the total excavations up to that time had not exceeded the sum of 1,700,000 cubic metres out of 125,000,000, and although in the previous month only 210,000 metres had been taken out, yet he *expected* (always full of *expectations*) to *double* that number in three months, and then *double again* the latter number, and then *once more double the result* of the last doubling, all in a few months! That is the same kind of reasoning or reckoning that the great promoter followed as to the estimated cost of the canal, only reversed; for, although the scientific congress of his own composition had in 1879 calculated the cost at the ridiculously low figure of 1,044,000,000f., he by degrees reduced it to the *maximum* of 600,000,000f.

Of course, the whole thing was an outrageous misrepresentation. *Up to last month* (May 1885)—that is to say, *twenty months* after the above-quoted promise was made on the eve of the issue of 3 per cent. bonds—the Canal Company never had as much as 700,000 cubic metres excavated in any month, except in two months, one of which was last April (1885).

The total output from June 1884 to May 1885 was 6,844,016, instead of the promised 24,000,000!

But, it will be asked, why does M. de Lesseps so persistently misrepresent the facts, or advance promises that he knows to be wholly untenable? The answer is very simple.

From the beginning M. de Lesseps knew very well that the Panama Canal, if possible from an engineering point of view, was financially impracticable, if the work itself should cost too much, or if the construction should last too long, thus equally increasing its cost. That is why M. de Lesseps has always been insisting that the canal will not cost more than 600,000,000f., and that it will be
ready for traffic in 1888, although he knows better. Now, how could he consistently say in September 1883 that the canal would be ready in five years and a half, unless he could manage to excavate thenceforth 2,000,000 cubic metres of soil and rock? He was bound to keep up the fiction of 1888 and, of course, to say that, although only 210,000 metres were now being taken out monthly, he expected soon to raise the number to 500,000, and soon afterwards to 1,000,000, and then to 2,000,000. The whole thing is a humbug, and has been so from the beginning.

In the same "Situation d'Ensemble," written to catch the sous of the French peasants, we read that Aspinwall has become a city, "very clean and coquette." Surely enough, that will be news to some foreign correspondents of the New York papers who lately visited that town, just before it was reduced to ashes by the local revolutionists. We learn also that the studies on the holding back of the Upper Chagres were still going on. In 1881 it was assured that the studies would be completed in June 1882.

M. de Lesseps in his annual report (as we showed) expected to have 15,000 labourers by October. This new edition of the report says that the highest number reached had been 11,000 in July, but that at the commencement of "next campaign" there will be from 15,000 to 16,000 men at work.

However, the issue of debentures was successful. M. de Lesseps had raised up to this time 150,000,000f. in shares; 125,000,000f. in 5 per cent. bonds; and now 300,000,000f. in 3 per cent. bonds; a total of 575,000,000f., or within 25,000,000f. of the estimated price of the canal.

In October 1883 the consulting committee was called
upon by the director of the works, M. Dingler, to give its opinion about his plans. The committee approved all his suggestions, including the creation of an immense reservoir to retain the waters of the upper Chagres to the extent of 1,000,000,000 cubic metres by means of a barrage made with the detritus from the excavations, the reservoir to be furnished with a surface deservoir, and with a culvert open in the rock, so as to regulate the discharge of the water to a normal flow of 400 m.c. for each second; and also to construct side by side of the proposed canal some channels for drainage.

As M. de Lesseps had clearly stated that in December 1883 the cubic excavation would amount to 500,000 metres, it will be interesting to hear now that in November it had been 333,500, and in December 395,000. We are so accustomed, however, to promises so extravagantly wide of the mark, that in this instance we can almost congratulate M. de Lesseps on his comparative correctness—he was wrong by only 20 per cent.

At the end of the year 1883 the total number of cubes excavated was 2,427,034 (Bulletin du Canal, No. 108, February 15, 1884).

Having thus reviewed whatever progress had been made by M. de Lesseps in the actual work of canal-digging from 1881 to 1883, and the preparations for the next "campaign" of 1883-4, we will now see what he has accomplished in 1884, and in the first five months of the current year. We need not repeat that the facts that we have detailed have become known to us from the company's official publications, from which we have quoted them.

We have prepared from the monthly telegraphic reports received in Paris from the isthmus the following
statement of the total number of cubic metres taken away in the isthmus. Between the total on last May 1, such as we find it, and the total now declared by the company, there is a discrepancy. The fault is certainly not on our side.

Number of Cubic Metres excavated.

<table>
<thead>
<tr>
<th>Month</th>
<th>Cubic Metres</th>
</tr>
</thead>
<tbody>
<tr>
<td>End of 1883</td>
<td>2,427,034</td>
</tr>
<tr>
<td>January 1884</td>
<td>580,000</td>
</tr>
<tr>
<td>February</td>
<td>600,000</td>
</tr>
<tr>
<td>March</td>
<td>615,000</td>
</tr>
<tr>
<td>April</td>
<td>650,000</td>
</tr>
<tr>
<td>May</td>
<td>660,000</td>
</tr>
<tr>
<td>June</td>
<td>711,992</td>
</tr>
<tr>
<td>July</td>
<td>650,000</td>
</tr>
<tr>
<td>August</td>
<td>600,372</td>
</tr>
<tr>
<td>September</td>
<td>600,182</td>
</tr>
<tr>
<td>October</td>
<td>673,818</td>
</tr>
<tr>
<td>November</td>
<td>565,652</td>
</tr>
<tr>
<td>December</td>
<td>500,000</td>
</tr>
</tbody>
</table>

Total at end of 1884: 9,834,050

<table>
<thead>
<tr>
<th>Month</th>
<th>Cubic Metres</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1885</td>
<td>550,000</td>
</tr>
<tr>
<td>February</td>
<td>590,000</td>
</tr>
<tr>
<td>March</td>
<td>627,000</td>
</tr>
<tr>
<td>April</td>
<td>775,000</td>
</tr>
</tbody>
</table>

Total up to May 1, 1885: 12,376,050

The average per month in 1884 was therefore only 617,333 cubic metres, and for the first four months of the current year has been but 635,500. How different; indeed, from the 2,000,000 cubic metres per month which M. de Lesseps promised for the dry season of
1883-4 But, then, there is nothing new in the non-fulfilment of his engagements.

It seems that M. de Lesseps is rather tired of his own figures. Before January 1885 his Bulletin published regularly the returns for excavations as telegraphed from Panama, and the monthly return was added to the grand total of cubic metres taken away previously. *That practice has since been given up.* In no case have we found this year the total excavated up to date. The figures for December 1884 to April 1885 are mentioned *only incidentally* in the Bulletin for May 15. Evidently M. de Lesseps is dissatisfied with the total sum. His energy is now directed to showing, not how he has kept up his forecasts and what is the total of work yet to be done and of money at his disposal to do it, but in making announcements of contracts for tremendous numbers of cubic metres to be completed in such and such a time.

In the case of Huerne and Slaven, who undertook the excavations in the *easiest part* of the canal, we have seen what these contracts mean. It is another way of making promises, brilliant, but never meant to be kept. The game is this:—M. de Lesseps is very backward in his work, and cannot be confronted with his own repeated assertions as to completing it in 1888. In order, then, to dispose of the cubic metres still untouched, and to *show* his countrymen that he can do so *very soon,* he parades a grand contract with such and such a firm, who have undertaken to finish so many millions of cubic metres in a short period. In that way he gets out, or expects to get out, of the responsibility of reiterated misstatements made solely by himself.

But what is the value to be attached to those contracts? Are the contractors subject to any fine or penalty
for non-fulfilment of their stipulations? Has any one of the previous contracts been carried out? Is it not true, as we showed in the previous chapter, that Huerne, Slaven and Co., who in February 1882 undertook to finish 6,000,000 cubic metres by August 1885, had hardly done any in January 1884, when their second dredge (!) which had just arrived at the isthmus, caught fire and became useless?

However, it cannot be denied that during 1884 much activity prevailed throughout the whole line. The work certainly progressed at a greater pace than in 1883, and what the French call "installation," especially in everything that regards administration, housing of labourers and employés, and hospitals, was as nearly perfect as possible; while material worth perhaps £3,000,000 had been accumulated along the line of the canal.

And yet the great problem of the Chagres was left untouched. In February 1884 there were but five excavators at the Culebra (hardest) section, and the improvements of the port of Panama and those at Aspinwall, so far as the breakwater is concerned, have been postponed.

In La France of April 12, 1884, M. Simonin, that unreliable writer of whom we have already spoken, gravely assured the readers of that paper—which disputes with the Journal des Débats the palm of disseminating the greatest number of misstatements as to the Panama Canal—that, "à partir du mois de Mai prochain il sera fait 2,000,000 à 2,500,000 de mètres cubes par mois, soit 25,000,000 de mètres cubes par an, tout en tenant compte de la saison de pluies, qui va de Mai à Novembre. Cela permettra de finir les travaux de Panama en 1888, et peut-être un peu avant cette date, comme le croit M. de Lesseps. . . . Le canal sera sans
doute, grâce à l'énergie constante de M. de Lesseps, entièrement achevé dans quatre ans."

This is how the intimate friends of the "Grand Français" have been writing, and will continue to write. When M. Simonin says that the canal will be finished in four years from April 1884 he may of course expect that we must wait and see. When, however, he says that from May 1884, henceforth, the output of excavations will be at the rate of 25,000,000 cubic metres per annum, we have only to say that the total from May 1884 to April 1885 was not 25,000,000, but exactly 7,504,016. We may also add that when M. Simonin wrote the above he knew as well as we did that M. de Lesseps could not possibly do what he had promised; for he had made the very same promise six months before, to have effect in January 1884, and the article in *La France* was published three months afterwards, when the writer knew that the cube for any one of the three previous months had not exceeded 615,000.

M. Simonin's article was quoted in the *Bulletin*, the journal of the company, in its number for May 15, just a few days previously to the announcement of the general meeting of June. Soon after that, the shareholders had a statement made to them of the condition of the work in March 1884, in which we see that the American dredging machine belonging to Huerne, Slaven and Co. had during that month excavated 20,670 cubic metres—not overmuch, all will agree. The average for twenty-five days was only 826 cubic metres for each, or less than one-fourth its alleged power. The statement also says that the "work of the surveys for the holding of the Upper Chagres basin still continues," and pathways had been opened in the valleys of the Gatuncillo, Limon, and Chagres, between the Chilibri and the Limon (March 1884).
In the Culebra section three excavators had been at work, and the output had been 72,282 cubic metres. The capacity of each of these excavators in the best weather is 500 cubic metres per day (see No. 104 Bulletin). It seems that in this month each excavator only dug out 288 metres daily during the twenty-five days.

The general meeting of 1884, which was to take place in June, was only held on July 23. The number of the Bulletin published just previously to the meeting is an extra double number, with five illustrations, and glowing accounts of the progress of the work.

M. de Lesseps is quoted as declaring that "rien jusqu'ici ne permet de supposer que le canal de Panama ne sera pas achevé dans de délai prévu, 1888." Furthermore, he says as to the resources of the company that "it still has at its disposal 150,000,000f. of the share capital, and 129,000,000f. in debentures."

At the meeting M. de Lesseps' annual report was presented to the 104,230 shareholders, of whom 19,143 held from six to twenty shares, and 80,839 held from one to five.

After reviewing the financial situation, he states that the average number of employés during the year was about 13,000. The sanitary condition was declared to be good. The cost of each patient at the Aspinwall hospital was 7.50f. per day, and in Panama 5.75f. Besides these two large hospitals there were thirteen ambulances.

M. de Lesseps then refers to M. Dingler's mission in the isthmus and to his programme of work, which was approved by the consulting committee in Paris. The work of excavation will consist of 110,000,000 cubic metres in the canal proper, and 10,000,000 more for the channels of the Chagres. The greater quantity of excavation, he adds, is compensated by the fact that the total
excavation in hard rock is not so extensive (which we roundly deny, having in view the company's own figures). In short, he sees nothing to lead him to believe that the canal may not be open for traffic in 1888.

As to the Chagres, he says that the studies, which had been carried on vigorously, were very satisfactory. The work needed to restrain the water was less important than expected. The proposed basin was much larger than contemplated.

The total result of the campaign of 1883–84, is that up to May 1, 1884, from the beginning of the company, 5,243,302 cubic metres had been taken away. M. de Lesseps says that in Suez they excavated 50,000,000 in two years, and that the shareholders should not mind his being so backward just yet. The Panama Canal was really easier than the Suez Canal. There is no need, as on the Nile, to bring fresh water by a special canal, nor to cause the canal to traverse a swampy lake or two sand mountains, nor to create a port on an inhospitable shore.

In Panama the whole matter is excavation, pure and simple. The problem is merely to have mechanical means enough to dig out a stated quantity of soil in a given period. Even if the works had not begun on dry soil before January 1, 1885, and the dredging in January 1886, the canal could be ready on January 1, 1888; but M. de Lesseps already gives the whole year 1888 away, and says that the work will be finished on January 1, 1889. In the isthmus there were 79 excavators, 20 transports, 256 pumps, 122 locomotives, 8,961 waggons, 418 kilometres of rails, 21 dredges, 72 portable steam-engines, &c.

Of course, in comparing Suez to Panama, M. de Lesseps did not quote M. Lavalley, the contractor of the Suez Canal who stated at the Congress of Paris in 1879
that the latter was not nearly so difficult of execution as the Panama. Indeed, in Suez there were not subsidiary channels to take away the Chagres water; nor was there the problematical barrage or dam to create the greatest artificial lake in the world, as it is proposed to do; nor was there any need of straightening the course of a mighty torrent; nor was a breakwater to be built such as is required in Aspinwall, nor a solid granite (not sand) mountain like the Culebra to be cut, &c. &c.

In September 1884 M. de Lesseps made another issue. This time the loan was in 387,387 4 per cent. debentures of 500f., issued at 333f., with interest from October 1. The par value of the loan was 193,693,500f., or £7,747,740, and the net result to the company was only 128,199,871f., or £5,127,994. He stated then that the company had in cash 85,467,424f., and could still call 50 per cent. on the shares, or 147,500,000f., being altogether, in round numbers, 233,000,000f., to which the result of the present loan was now to be added, thus making as total available resources in September 1884, no less than 362,000,000f., or £14,480,000.

In December M. Dingler telegraphed that the company had entered into an agreement with a firm of Anglo-Dutch contractors for excavating 11,900,000 cubic metres in the Culebra, up to line 50th, at the rate of 700,000 cubic metres per month, commencing in June 1885—the current month—and ending in October 1886. The price agreed on was given as 90,000,000f., or at the rate of 7.5f. each cubic metre. The total number of employés and labourers in December said to be 20,239.

In No. 132 of the Bulletin of February 15, 1885, a list is published of the twenty-one contracts now entered into for excavations with persons of different nationalities. It is a great pity that the cube to be taken away is not
mentioned, but only the rough amount of the price, which runs up altogether to 236,450,000., or £9,458,000. There is but little use in giving the price of a thing without stating what the thing is. It should be borne in mind that such contracts do not include the prices that the company have to pay for many supplies of the so-called "work-yards," nor with housing, &c.

If the Panama Canal directors are really to finish the work in 1888, and if the work will cost no more than the 600,000,000., as they have often asserted, they should be glad to furnish their shareholders at their meeting this month with something like a clear statement of the whole condition of affairs. Let them say how many cubic metres are really to be excavated from this time. Let them publish in their Bulletin the different contracts with contractors, showing prices to be paid, fines to be imposed, and the other guarantees of good faith and safety for both sides. Let them be frank. Their reports have a great deal about Suez Canal and too little about Panama. Their Bulletin is full of trash about the trade of California, Chile, and Australia, and of puffs—of paid puffs reproduced from other papers.

Reviewing the work that they have been doing, while it cannot be denied that a great deal of machinery and other material has been imported into the isthmus, and while the organization of the administration and establishment of the centres or shop-yards is said to be perfect, we cannot admit that, considering the vast sum of money that has been raised, anything of importance has been accomplished in the work of the canal itself. The great difficulties of the work are not in excavations; if money enough is to be had one can excavate the Andes or the Himalayas. M. de Lesseps says that he has excavated 12,000,000 of cubic metres, and he has certainly
bought the Panama Railway and material for digging the canal at a cost of $575,000,000. less whatever he may have now in cash, which we hope to know in a few days, when he will present his yearly report. That is the total sum of what he has done for his shareholders. The work, so far, was not difficult if the money was forthcoming, as it has been forthcoming. The only question is whether what has been done, as above referred to, is worth the $575,000,000, or £23,000,000 (less the cash on hand), for which the company is liable. In September last the cash resources of the company, together with the proceeds of the new loan, were $203,000,000.

But the difficulties of the Panama Canal will only commence when that money is spent, and the shareholders shall have paid in their remaining, and uncalled, share capital, and when the Chagres problem is confronted. So far, everything has been easy. But when the world sees that the $600,000,000 was a delusion, that the whole canal is apt to be destroyed in twenty-four hours by some of the mighty freshets of that stream which at Matachin runs about 40 or 50 feet above the level of the canal, and itself rises to 40 or 50 feet higher; then, and only then, the difficulties may be said to have begun.

But we need not enter into that subject now. Having reviewed the work done from 1881 to date, we will now see what some intelligent visitors to the isthmus have had to say, and what several officers of the United States Navy have reported to their Government as to the prosecution of the work.
CHAPTER XI.

OPINIONS OF VISITORS ON THE WORK.—NO. I.

Views of a professional correspondent of the New York Herald.—He thinks the total cube will reach 150,000,000, instead of 46,000,000, 75,000,000, 110,000,000, and 125,000,000 metres, as it has been stated. —The Chagres problem: the basin of the river has not been properly surveyed. —Doubts as to the ultimate success. —Horrible climate. —Inefficient labour. —Extravagant management. —The canal will cost more than $350,000,000, or £70,000,000 if it could be finished in 1889; but it can only be finished many years later. —Another correspondent says that M. de Lesseps' engineers are discouraged and propose to abandon the sea-level plan. —The canal only finished in fifty years. —The Chicago Engineer thinks that even in twenty-four years the canal will not be ready. —The mud taken will revert to the canal. —The company to be bankrupt in 1886.

We have shown what the company has been accomplishing on the isthmus according to its own official records, and, limiting our comments on the wide difference between that which has been done and that which has been promised, it will now be found of interest to see how the prosecution of the work and the general prospects of the undertaking have impressed some American visitors to the isthmus. In this article we will give an account of what three able correspondents have written to the New York Herald and the American Engineer of Chicago; and in the next chapter we shall deal with the reports of four officers of the United States Navy who lately visited the isthmus.
A most intelligent correspondent of the *New York Herald*, who, to judge from the letter he wrote to that paper from Aspinwall, under date of Feb. 8, 1885, must be a professional engineer, and one of very sound judgment, makes a thorough review of the plan of the canal, the engineering difficulties, and the probability of its being finished at the time specified by M. de Lesseps (1888). Before regular surveys could be undertaken, he says, it was necessary to clear the line to the extent of 100 metres in width of a tremendous amount of tropical vegetation and forest. Even now, it is necessary every year to destroy the vegetation which springs up during the wet season and attains a height of from 8 to 10 feet.

The preparations for the work were most elaborate and complete. Immense quantities of material, dredges, excavators, tugs, scows, &c., were ordered. Houses, hospitals, in fact little villages were constructed upon each of the twelve sections of the line. A small army of engineers, draughtsmen, &c., were brought over from France. The annual expense with them is £400,000. The salary of the Director-General, M. Dingier, is £20,000 a year, besides house, horses, and carriages.

This correspondent thinks that the total amount to be excavated amounts to 150,000,000 cubic metres (196,040,000 cubic yards), and not 125,000,000 as stated by the canal people. (In making up the estimate of cost, Chapter VIII., we have taken the smaller figure.) The two sections, Emperador and Culebra, contain 50,000,000 cubic metres mostly solid rock, and constitute the great obstacles to the completion of the canal, as far as the simple work of excavation is concerned.

The powerful dredges of the American Dredging Company, which are the best on the isthmus, and are at work near the Aspinwall terminus, have the maximum
capacity of 8,000 cubic metres per day when working in soft earth.

The great difficulties in the construction of the canal are presented by the surface drainage, and particularly by the much-remarked diversion of the Chagres River. During the dry season this river is 2 feet deep. In the rainy season it rises in a few hours to the height of 40 feet, and flooding the country rushes with great violence towards the sea, carrying with it not only an immense mass of detritus washed from the soft earth of the forest, but an immense amount of débris. Now the river has its source 40 or 50 miles east of the line of the canal, which it first crosses at Gamboa, where the bed of the river is about 50 feet above the bottom of the canal. From Gamboa to the ocean the Chagres intercepts the canal no less than twenty-nine times. When the river rises its surface will be at nearly 100 feet above the bottom of the canal. Such a flood falling into the canal from such a height would either totally destroy it or at least blockade it for many months, and would require an immense outlay of money to dredge it.

The smaller rivers, Rio Grande and Rio Obispo, cross the canal eleven and seventeen times respectively, and if allowed to flow into the canal they would, of course, cause much damage. It has, therefore, been decided to cut new channels for all these rivers, utilizing the original channels wherever possible. New channels will thus be required to the extent of more than 30 miles. The great problem, however, and the only one that presents very great engineering difficulties, is the controlling of the tremendous floods from the Upper Chagres, the large area drained by which forms a basin surrounded by hills. The outlet of this basin, near Gamboa, lies between two hills a mile apart, between which it is proposed to con-
struct a dam or embankment of earth much resembling an immense railway embankment, but sloping more gradually. Its length will be about one mile, and its height over 200 feet. Beneath the dam a large culvert or tunnel 50 feet wide will be constructed of solid masonry, and large enough to admit the ordinary flow of the river. The inner end of the tunnel will be fitted with strong iron doors by which the flow from the Upper Chagres can be entirely stopped. At the upper edge of the dam an overflow channel will be cut by which the water will be carried to join the channel cut for the diversion of the Lower Chagres, on the eastern side of the canal. This sluice or channel will be large enough to carry off a much larger volume of water than the ordinary flow of the river.

This most observing correspondent says of the area or basin of the Upper Chagres:—"There are still some doubts as to whether the estimated capacity is not too large, for its basin has not been accurately surveyed. There is at present a party of engineers engaged on this survey, but although the area is not large, the difficulties encountered are enormous. In order to arrive with any degree of accuracy at its capacity it will be necessary to run a line of levels at the height of the dam completely around the basin, following all the intricacies of the innumerable ridges and hills; then a sufficient number of cross sections to give the contour of the bottom. It is also necessary to know the area drained by the Upper Chagres, which multiplied by the greatest observed rainfall gives the volume of water the dam will be required to contain. All the lines for this survey must be cut slowly and laboriously through a perfect wilderness of forest and jungle, so thick that it is impossible to see 10 feet in any direction, and so gloomy, mushy, and
stifling that it is difficult to breathe. Until these surveys are made there must remain a doubt as to the ultimate success of the canal, not to mention the difficulty of completing such an enormous work across a river subject to such freshets. In order to safely drain such an immense volume of water through the artificial channels considerable time will be required. The question naturally arises—What will become of the structure in the not improbable event of a second heavy fall of rain while the dam is only partially drained of the first flood? There cannot be much doubt that, being an earth embankment, it would be entirely swept away. The terrible effect of this volume of water suddenly hurled into the valley of the Lower Chagres can scarcely be conceived. Everything would be swept before it, and the Atlantic end of the canal would be completely destroyed.”

The writer then goes on to speak of the climate: “One of the most serious difficulties encountered is the unhealthiness of the climate and the consequent inefficiency of labour.” Even during the healthy season there is considerable dysentery, yellow and malarial fevers. In Panama yellow fever is almost epidemic. Nor is it confined to the lower classes, for M. Dingler, the director-general, lost his son, daughter, and wife in rapid succession. Panama, as well as Aspinwall, are disgracefully filthy, and these wretched cities exercise a most baneful influence on the health of the labouring population of the isthmus.

The efficiency of the Jamaica negroes working on the isthmus is about one-fourth or one-third that of American labourers in America. They receive 4s. to 6s. per diem, which is like paying 12 to 16 in America.

The country offers absolutely nothing but bananas
and oranges: all breadstuffs are brought from Europe and the United States, and beef from the Spanish main.

The Aspinwall wharves are inadequate to the great quantity of freight landed there, and consequently a great deal of money is expended in demurrage fees. At Panama vessels must be discharged by means of lighters — a ruinously expensive method. "It costs more to land lumber from a vessel at Panama than the first cost, added to its transportation from Oregon. The cost of coal is increased two-thirds;" it is worth £3 per ton in the harbour and £5 when landed.

The writer then dwells on the extravagance with which money has been expended. For instance, twenty-eight locomotives ordered from the United States were found to be useless for the work intended for them; they were ordered without proper care and proved to be almost a total loss.

Treating of the prospects of the company, this correspondent remarks that the amount of earth excavated up to January 31, 1885, according to the company's Bulletin, is 11,000,000 cubic metres. The amount of money subscribed by the shareholders is 600,000,000f. If to this be added the proceeds of the sale of bonds of 500f., we have 729,000,000f. But as on January last the balance on hand was 362,000,000f., the money already expended at that date was 367,000,000f. Subtracting 55,000,000f. for excavating the 11,000,000 cubic metres, we have 312,000,000f. as the sum expended for preliminary purposes, and for material and machinery, and installation in general.

Now, he continues, "it is apparent that the canal cannot be completed with the amount of money now on hand, there being 139,000,000 cubic metres to excavate
at about $1 (48.) per metre, and only $72,000,000 on hand. But the most important consideration is the time at which it will be finished, and this is a particularly hard proposition for solution. From a knowledge of the amount excavated during the last year, or the rate of progress in the excavation at present being made, it would seem impossible to complete the enterprise in less than twenty years, or in 1905. It is only fair to state, however, that on none of the sections has the full force of men and machinery been brought to bear which it is expected will be working in the near future. Assuming that all the machinery and men promised are at work at the contemplated time, and that the excavation of the enormous amount of earth that they claim to be able to dispose of each year is successful, the canal may be completed in 1889, with the exception of the great Culebra and Emperador cuts, which it does not seem possible can be finished in that time. The progress of the work on the Gamboa dam will depend on these cuts, as it is to be built of the earth excavated from them. Another difficulty which may be reasonably anticipated is that toward the bottom of the deep cuts, streams of water of such volume as to seriously impede the work may be encountered. They may, at all events, render the excavation of rock very expensive by requiring continual pumping. It seems fair to conclude, first, that if the diversion of the Chagres by means of the Gamboa dam is successful, and if no insurmountable obstacles are encountered in the great cuts at Culebra and Emperador, the canal can be finished in time with sufficient money; second, that supposing the canal is completed in 1889, and allowing $1 per cubic metre for the remaining excavations, and 100,000,000f. (M. de Lesseps' estimate) for the Gamboa
dam, the whole cost, interest included, must be something more than $350,000,000" (or £70,000,000), "even if it is finished in 1889; third, that at the rate at which the work is advancing, or is likely to advance, it will be many years later than 1889 before it can be completed."

Another correspondent of the New York Herald, writing from the city of Mexico as late as April 24 last, gives an account of an interview he had with Mr. Nathan Appleton in that city, and gives his opinion upon the Panama Canal question, which he has followed up very closely, and, we may add, very intelligently. After saying that the Lesseps Commission of 1880 estimated the cost of the canal at £32,000,000, which figure M. de Lesseps cut down to £24,000,000 (as we have already stated in detail in previous chapters), the correspondent, who knew Colonel Totten, says that he "had expressed his conviction, through the press, that the cost for the proposed tide-level way could not be less than $400,000,000"—i.e., 2,000,000,000, or £80,000,000. Colonel Totten told the same thing to the writer of these lines, and added that a tide-level canal for Panama was an absurdity.

The correspondent remarks that out of the £24,000,000 M. de Lesseps, by his own showing, has already spent £16,000,000, and he adds that he has been informed by "an officer of undoubted influence and high position under M. Dingler" that the inner circle of canal authorities do not believe that it will be possible to build a sea-level canal, and to control the Chagres. "The informant," he concludes, "said that the directors do not believe that they can finish their task under fifty years."

In October 1884, the American Engineer of Chicago
published a remarkable article, written by a gentleman who had spent several months on the isthmus and devoted his entire time to examining the work in progress. He had been given exceptional facilities to study the matter, and he had left the isthmus in April 1884. The writer of the article is astonished that so little truth has been told about M. de Lesseps' scheme: the principal reason is, he says, that the whole French press is subsidized.

The writer is of opinion not only that the canal cannot be ready in four years' time, as promised by M. de Lesseps, but cannot be finished even in twenty-four years. On May 1, 1884, after two years' work, only 4,000,000 cubic metres had been taken away, out of a sum total which is fully, he thinks, 130,000,000 (we have placed it at 125,000,000). Of this, 36,000,000 are of exceedingly hard rock near Culebra, the more difficult to blast because it fractures irregularly. There are 30,000,000 more in Emperador, Obispo, Paraiso, and Gorgona, as well as very tough clay. The surface has merely been scratched, although the "installation" is thorough and complete.

Speaking of the part of the canal near Aspinwall that has been dredged, he says that "every particle of mud dredged thus far will have to be handled a second time, as it is thrown out as soon as dredged upon the western side of the canal, where it has to be widened, so that it must all be redredged, rehandled, loaded upon scows and carried out to sea, as should have been done from the beginning." The French engineers have, it is said, ignored the fact that for a sea-level canal there can be no other proper dumping ground than the bed of the sea. The turning of the Chagres waters at Gamboa presents to this writer insurmountable difficulties. The stone dam,
144  THE PANAMA CANAL.

170 feet high at its central point, is estimated at £4,000,000, but if one may judge by the constant and enormous variance from the estimates made by the canal engineers and the actual cost of the work it will cost £12,000,000 at least.

The writer then deals with the finances of the company up to April 1884. According to the company's own statements $94,200,000, or £18,840,000 have already been raised, and yet only 5-13ths of the excavations were ready, and that of the easiest work. The difficult work has not been touched, to say nothing of getting rid of the floods of the Chagres. In addition to that the engineers of the company estimate £4,000,000 as the lowest sum which will have to be expended for the great lock and basin back of Mount Ancon and the Panama terminus. With the best possible methods the canal cannot be completed except at a fabulous sum. It may be completed, he adds, "but not by the existing company, or under the existing management." Its completion before the year 1890 is scarcely possible, and, unless radical changes are made in management and mode of working, absolutely impossible. "It is probable that the present company will go into bankruptcy or liquidation in three years from 1884, and the enterprise be taken up or completed by a new company or a Government."

The special correspondent of the New York Herald in Washington, Mr. Charles Nordhoff, a gentleman of long experience of public affairs, giving an account of the article in the Engineer, above referred to, says that "here in Washington, where the importance of an interoceanic canal is fully understood, and careful reports of all the surveys are to be found, the opinion prevails that the present company will go into bankruptcy." (New York Herald, November 2, 1884.)
CHAPTER XII.

OPINIONS OF VISITORS TO THE Isthmus.—NO. II.

Lieutenants R. M. G. Brown, R. P. Rodgers, Francis Winslow, and R. H. McLean, of the United States Navy, report on the canal.—Lieutenant Brown thinks a crisis is imminent.—Lieutenant Rodgers takes in all that the French tell him: his ludicrous inconsistencies.—Like the French, he does not look backwards, only to the hopes of the future.—He even believes that the canal will be finished in 1888.—Lieutenant Winslow thinks the canal authorities cannot be relied on.—If the canal is ever built it cannot be ready before 1897.—Lieutenant McLean thinks that the Chagres basin has never been properly surveyed.—Even if the canal could be finished in 1888 (he does not believe it possible), Lieutenant McLean shows it would have cost £70,000,000.

In July of last year (1884) Lieutenant R. M. G. Brown made a report to the Secretary of the Navy of the United States. Of course the figures that he gives are now a year old. Nearly one-half of the time in which the work was to be made had elapsed, and yet, says Lieutenant Brown, already £12,000,000 had been spent in preliminary work, and the little excavation that had been made, which was, in July of 1884, not more than 5,000,000 cubic metres. "Everything connected with this scheme had been carried on in the most extravagant manner. In the first place, the Paris Congress, which was virtually controlled by its promoters, ignored the results of its most careful surveys, and disregarded the most weighty opinions of experts on the subject, and decided that a
tide-level canal, without locks, should be constructed under the direction of M. de Lesseps."

Lieutenant Brown then states that large sums have been expended for materials and machinery at extravagant prices, much of which has proved unavailable. An official staff of 800 persons has been maintained for conducting the work of surveys and engineering. The hospitals cost £600,000, and are insufficient for the care of the thousands. Forty-eight officers of the company had died, up to July, of yellow fever, and labourers die at the rate of 100 a month.

He goes on to say:—

"The surface of the line has barely been scratched, and none of the great difficulties of the work have yet been encountered. Only a small fraction of the excavation has been made, and the great problem of disposing of the Chagres River is practically untouched." The whole money of the subscribers will have been spent before the canal is even half finished, and before the feasibility of its completion on the present plan is demonstrated. By that time Lieutenant Brown thinks there is likely to be a loss of confidence, which will make the raising of more capital a matter of difficulty. The completion of the canal, he says, "is very doubtful," and "it will certainly require much more time and money than was originally estimated."

When the resources are spent a crisis must determine the fate of the whole project. It is not unlikely that an appeal will be made to the Government of France.

The recent disturbances in Aspinwall and Panama called for the interference of the United States Navy. Its vessels were constantly on duty near the isthmus, and the commanding officers in several instances commissioned younger officers to collect as many facts as
possible during their brief stay about the work of the canal. The three principal reports made are those by Lieut. Raymond P. Rodgers, now in charge of the Bureau of Naval Intelligence at Washington, by Lieut. Francis Winslow, and by Lieut. R. H. McLean. The two latter are summarized in the *New York Times* of May 1, 1885, and that of Lieut. Rodgers is published with profuse illustrations in Washington (*Senate, Exec. Doc. 123*). Ample extracts of it are given in Prof. Nourse's recent work, and the report is translated in full in the *Bulletin du Canal*, No. 112.

Lieut. Rodgers gives, on February 1884, a full description of the plans and intentions of the French, such as they have manifested them.

We are sorry to say that the report of Lieut. Rodgers, elaborate as it is, shows lack of independent investigation, and often mentions as facts mere conjectures of the French. The lieutenant took all his information from his hosts, and his good faith has been abused.

The probable number of persons employed in all sections is at least 15,000, he says; and "the amount of excavation has gradually increased until 700,000 cubic metres per month have been reached. It is hoped that the month of February will produce 1,000,000 cubic metres, and that later the amount of 2,500,000 will be removed each month. . . . The rains will reduce the excavations of the wet season by about one-fifth, so that it is not unlikely that from May 1 next an annual excavation of 25,000,000 cubic metres may be counted upon."

Of course that is what the French wanted Lieutenant Rodgers to say, and it is to be regretted that he, having in view the work that had been accomplished up to January 1884, when he wrote the words above quoted,
had not discretion enough to distinguish between promises and deeds. It is remarkable that Lieut. Rodgers did not deem it fit to give the actual number of cubic metres that had been excavated up to January 1884; he speaks only of what "it is hoped" and of what "it is not unlikely." If he had taken the trouble to find out that total he would have been himself confronted with meagre results in the past and immense expectations for the future, which would have led any man of caution to refrain from prophesying.

Consequently the above statement of Lieut. Rodgers is entirely erroneous, and unworthy of an officer who is at the head of the Bureau of Naval Intelligence of the United States. It is not true, to begin with, that "the amount of excavation has gradually increased until 700,000 cubic metres per month have been reached." Up to December 1883, the last month of which Lieut. Rodgers could have statistics of excavation (his report being dated January 1884), no such number as 700,000 had ever been reached. It would have been very easy for Lieut. Rodgers to have discovered in the Bulletin du Canal, No. 104, for Dec. 15, that the number of metric cubes excavated in October 1883 was exactly 313,633; and in No. 106, for Jan. 15, 1884, that the number of metres for December had been but 395,000. It is unpardonable in Lieut. Rodgers to have almost doubled the monthly amount of excavation that was then being done.

"It is hoped," he goes on, "that the month of February will produce 1,000,000 cubic metres."

If Lieut. Rodgers had not taken for granted the French 700,000 per month he would not have fallen into this silly statement of French "hope." One million per month from February would alone make up 3,000,000 by May 1. Well, the total number of excavated metres
at the latter date from 1881—that is to say, in three years—was but 5,243,302. That alone shows what became of the expected 3,000,000. The fact is, that in February the cube taken away did not exceed 600,000 metres; that of March was 615,831; that of April, 650,000; and so on. Even in November it was but 565,652 metres, it never having reached even 800,000 in any one month, so far as it has been reported up to June 1885.

Of course if the 1,000,000 a month from February 1884 has fallen to the ground, what becomes of the estimate endorsed by this extraordinary lieutenant, that "it is not unlikely that from May 1 next (1884) an annual excavation of 25,000,000 may be counted upon?"

We do not attach the least weight to any opinions of Lieutenant Rodgers, who thus showed himself so incompetent to use his own head and eyes on the Isthmus of Panama. For us it is wholly immaterial that "it appears" to him "that the question whether this is or is not a better route than that of Nicaragua has almost passed from the problem of interoceanic communication." If Lieutenant Rodgers in an official report to his own Government omits to state how many cubic metres the French had excavated in Panama, while he so complacently tells us what they would do next month, and for months hence, if he almost doubled the cube excavated at the date in which he investigated the affairs of the Panama works, what is his opinion worth about the comparative merits of Panama and Nicaragua?

And yet even this thoroughly partial witness, speaking of the conclusion of the work in 1888, so often announced by M. de Lesseps, admits that while it "is not impossible, with the requisite money, that the sections of the canal, exclusive of those of Obispo, Empire, Culebra, and Paraiso, may be ready for service
within the time specified, it does not seem possible that these most formidable sections, with their cuts of great depth and width, can be made ready, nor that the ports at the extremities can be completed for some years later. Consider the section of Culebra, with its great excavation of more than 25,000,000 of cubic metres, and suppose that the large amount of 300,000 cubic metres be removed each month from it, at this rate it would take seven years to complete this section.”

Speaking of the finances of the company, Lieutenant Rodgers writes as follows:—

“It is impossible for me to know the financial condition of the company; but from more than one source I infer that about $40,000,000 have thus far been expended (not including the cost of the Panama Railway).

“There is an immense amount of machinery and material now on hand or contracted for, and it is probable that there remains sufficient funds from the amount already subscribed to meet promptly the current expenses for two years to come.

“After that, with the enterprise well begun and with a fair proportion of the whole excavation already removed, it would seem plausible that the prestige of M. de Lesseps’ name, and the confidence which the investors of France have in his ability to carry through successfully this great work, would procure the further necessary subscriptions. Whether the estimated sum—600,000,000f.—will prove sufficient, time alone can decide; but as one-third of this amount has already been expended, it would seem insufficient to complete this most formidable undertaking.”

Of course, if it was impossible for Lieutenant Rodgers to know the financial condition of the company, his forecast of the future could never be relied on. He admits
that the canal could not be ready before seven years from 1884, or in 1891—eleven years after the formation of the company; he also admits that up to January 1884 the company had spent £8,000,000 out of the total estimated cost of £24,000,000; he says that there is money enough left for two years to come (i.e., up to 1886), and yet it only seems to him that the £24,000,000 are insufficient, while he himself says that the work will not be finished before 1891—i.e., five years after the time for which there is any balance left of the £24,000,000!

It was but natural that the canal authorities should have translated and published in their Bulletin the whole of Lieutenant Rodgers' report.

Another naval officer of the United States who visited the isthmus lately is Lieutenant Francis Winslow, who on February 28 was ordered by Commander Wilder, of the Yantic, to make an investigation. He wrote a long, minute, and apparently very careful report. He complains of the unwillingness of the French to show him some of the sections of the works. He could obtain no vital statistics at any point: all is conjecture in that matter. Lieutenant Winslow regrets that the company does not make public the plan of the barrage or dam of the Chagres, the most important part of the work, upon the solution of which depends the whole success or failure of the canal. Indeed, it is impossible to obtain any information with regard to it sufficient to enable any one to form a judgment. He doubts if any definite plan for the great dam has been made. The control of the Chagres, the most difficult part of the canal, is thus left to the last moment, whereas the work should not have been undertaken without a clear conception as to what to do with it. To leave it to the last is simply absurd.
Lieutenant Winslow, after examining the locality, believes that upon the occurrence of the first freshet the Chagres will take possession of the canal at every crossing (it crosses it twenty-nine times), and sweep dredges, excavators, and transporting apparatus out of existence.

Lieutenant Winslow says that he and his companions remarked the tendency on the part of the canal officers to exaggerate everything that has been done by the company. He often had occasion to remark great discrepancies between their fiction and the facts such as he and his assistants saw. After describing minutely the work done, the methods employed, machinery, housing, sanitary arrangements for each section, he sums up his observations by saying that he believes there were still 128,000,000 cubic metres to be excavated, besides whatever the company had accomplished up to February 1884.

According to M. de Lesseps' report, says Lieutenant Winslow, 40,000,000 cubic metres can be removed by dredges. To do that in three years (so that the canal might be finished in 1888) would require forty machines. There were only ten employed last February, and even with the eleven that were expected soon, the Lieutenant cannot see how they could do the work in less than five years.

Then there are (as said by M. de Lesseps) 7,500,000 cubic metres of stone to be taken out by hand and by excavators. Assuming that 700 metres—a large estimate—would be taken out each day, it would require the constant employment of 127 excavators for three years. But there were only forty-two. So that from Lieutenant Winslow's observations, although vast sums of money had been spent in machinery, the company, after all, had not obtained sufficient excavators.
While the number of employés is put down at 19,000 in the official reports, Lieutenant Winslow does not believe there were more than 15,000. The low death-rate given in them is entirely irreconcilable with what he and his companions heard and saw, and he had trustworthy figures to show that among not more than 7,000 people, during November 1884 more than 260 died.

At Panama the impression prevailed that the company was getting short of money. While the work accomplished in the past three or four years is by no means a safe criterion by which to judge of the possibilities of the future, it, however, gives an indication of the course to be pursued. Lieutenant Winslow does not think that the excavations will exceed 5,000,000 cubic metres a year, as in 1884. But even if they were doubled it would take fully twelve years to complete the work, and the canal, instead of being ready in 1888, would be finished only in 1897—sixteen years after commencement.

One month before Lieutenant Winslow finished his study, Lieutenant R. H. McLean, of the Swatara, also stationed at Aspinwall, was sent by Commander Wiltze to report on the Panama Canal works. His instructions were, "to obtain accurate information regarding the progress of the work, and such information as might be valuable in determining the ultimate success of the undertaking, and of the obstacles to be overcome." A board of inquiry was formed, including engineer F. C. Rider.

Lieutenant McLean says that the amount of earth and rock that is to be excavated is not accurately known. The official statement puts it at 1,111,000,000 cubic metres. M. Dingler, the Director-General, thinks that it will
be 120,000,000. The Lesseps Commission five years ago thought that it was 75,000,000. No doubt, the Frenchman had overcome many difficulties already, as there is nothing to be had at the isthmus, not even food. The expenses of demurrage for lack of proper wharves were very great.

Panama and Aspinwall are about as dirty cities as exist. Their streets are the receptacle of all unspeakable garbage and slops, and prolific breeders of disease. The labour of the West Indian negroes is very inefficient. They spend all their earnings in dissipation.

The machinists and founders are nearly all Americans: the machinists get $6 (twenty-four shillings a day. No labour is performed at the canal works between 11 a.m. and 1 p.m. The American Dredging Company has cut a channel 10 feet wide, 12 to 15 feet deep, for a distance of 10½ miles from the entrance. Below 15 feet blasting will be necessary. But this section can be completed in 1888, as well as the low and easy section nearest to Panama. In the section of Buhio Soldado there is one hill 131 feet high. It is to be excavated by contract at 6s. id. per cubic metre: 2,000 men are employed here. The Gorgona section has 1,000 men, who are taking out 1,000 to 1,600 cubic metres a day. Up to this point there are no difficulties to prevent the canal being finished in 1888, provided money enough is forthcoming.

The Obispo section has a height of from 66 to 205 feet of rocky soil. The excavation here is contracted at 5s. 6d., and there are 2,000 men at work. The monthly excavation is 100,000 to 130,000 cubic feet. At Emperor the work is being carried on by the Canal Company with 1,400 men, seven excavators, fourteen locomotives, &c. There are 25,000,000 cubic metres to be removed, and Lieutenant McLean says that “the com-
pletion of the section cannot be accurately determined."

The Culebra section includes the summit and a great deal of rock. Here is the deepest cut, 820 feet in width at the top, and 25,000,000 cubic metres to be removed, of which only 4,000,000 have so far been taken away.

The Paraiso section, with 8,000,000 cubic metres of hard rock, is difficult, because most of the work has to be done by hand: 400,000 cubic metres have been taken away.

But the greatest difficulty of the canal lies in the barrage of the Chagres river, between the large hills of Obispo and Santa Cruz. The Lieutenant gives a detailed and graphic description of what so far is a general plan of the French. The rainfall in that valley, he says afterwards, is incredible to anybody who is accustomed to the fall in temperate latitudes. A storm in 1884, lasting four hours thirty-five minutes, poured 5.53 in. of rain. In May of last year the Chagres rose 9.84 feet in twenty-four hours. On July 18 and 19 it rose 13.78 feet. The basin to be formed is said to be able to contain 6,000,000,000 cubic metres of water, but it has not been accurately surveyed. If that quantity of water were reduced to the depth of 12 inches, it would cover an area of 758 square miles, and the French think no more than that is likely to fall over such an area, although in 1879 the Chagres rose 40 feet at Gamboa, where it first intercepts the present canal line. The question which has not been solved is, whether the dam will be able to resist a second freshet before the waters of the first are disposed of.

Taking the statement of M. de Lesseps on September 5, 1884, that the resources of the company were
362,000,000£, and that 350,000,000£ were still on hand January 1, 1885, and accepting his supposition, that the canal can be finished December 31, 1888, the following is the financial outlook:—Present contracts not yet completed will require 203,000,000£, or £8,120,000. To carry out contracts for parts not yet contracted for will require 255,000,000£, or £10,200,000, which, together with 100,000,000£, the estimated cost of the barrage, will amount to 558,000,000£, or £22,320,000. The canal company must carry a load of 25,749,740£ interest.

The report assumes that on July 1, 1886, the company having paid all interest to date on the original stock and the loan of September 1884, and having paid 170,000,000£ for works, will have exhausted their resources and will have to negotiate another loan. Supposing that its credit remains unchanged, and it raises a loan in 1886 of 807,000,000£, its bonded debt would be 1,601,495,901£, or $320,000,000, or £64,060,000. If the canal is not completed in 1888, at least 12,000,000£ will be needed to pay interest on loans. The amount spent to date of the last report of the company was 370,000,000£, or $74,000,000.

Lieutenant McLean concludes that, considering the difficulties that are met, the large amount of money spent in preparations, materials, &c., has been well spent. He thinks, however, that ample preparations have been made, and sees no reason why, with plenty of money, the work should not proceed rapidly. He does not think it possible that the canal can be finished in 1888. Even if completed in 1888, its cost must be at least $320,000,000, and it is his opinion that it would be $350,000,000. It was hoped that in May 1885 the two dredges working on the Colon and Gatun sections would meet, and that the portion of the canal excavated would
be opened, having only half depth of water. It was generally believed that that part of the canal would be opened with ceremony by M. de Lesseps in person, and that the demonstration, together with the confidence inspired by M. de Lesseps, would so help the Canal Company's credit that a new loan, large enough to carry the work to completion, could be negotiated.
CHAPTER XIII.

THE FINANCES OF THE COMPANY.

Very scanty information.—In fifteen months £8,800,000 spent, and only 1,103,000 metres excavated, out of 125,000,000.—£22,275,000 already raised to this day, and yet M. de Lesseps still adhering to the fiction of £24,000,000.—£57,125,000 in cash must still be raised to finish the work, presuming that the Chagres offers no difficulties, and that there are no contingencies unexpected by M. de Lesseps.—The future business of the company will start with a deficit of £3,300,000 per annum.

We have sketched out the various efforts made to solve the problem of interoceanic communication, and we have shown that the present Panama Canal Company is not an enterprise that was brought into existence by any careful and serious consideration of the elements which make up that problem, but it was rather the jobbery of a few men who were bent upon making use of the honoured name of M. de Lesseps, who allowed himself to be ensnared into the trap laid by them.

We have shown that the Panama Canal, begotten of unworthy purposes, was bound from the beginning to prove a great failure, because not only was it badly designed in itself, but its projectors also overlooked the great difficulties presented to the engineering art. Indeed, this rude project was conceived on a misapprehension of its own financial bearings, and in defiance of the most rudimentary principles which should control even an undertaking of much smaller proportions.
We have endeavoured to show how persistent M. de Lesseps has been in misleading his capitalists, not only as to the engineering difficulties, but also as to the financial difficulties; how he makes light of the unsolved problems of the Chagres, and how he is still saying that the canal will cost £24,000,000, and will be ready in 1888. That the canal cannot be ready in 1888 we have shown from the work that is still to be done; and that the canal cannot cost only £24,000,000 we have also proved from the official data furnished by the company itself. We will now show how much money has been raised and how it has been spent; and having in view the work still to be accomplished, we will demonstrate that the Panama Canal, if it is ever to be finished, must cost so much as to prove a ruinous investment to the unlucky believer in the luck of M. de Lesseps.

In studying the finances of the Panama Canal Company, we are from the start confronted by the great difficulty that the data furnished us are very meagre indeed. In France the balance-sheets are only presented for study and discussion one year after the closing of the fiscal year that is balanced. At present, for instance, the last balance-sheet to be had refers to the year from July 1882 to June 1883. Only at the general meeting of the company to be held in July 1885 we will have the inventaire for 1883-84.

The least possible is said in such balances, and this fact, taken in connection with the late date at which they are published, renders the task of the student most difficult.

However, without claiming to be as precise as we should like to be in such case, we will do our best to
collate all the elements that we may have, in order to get at a clear view of the finances of the Panama Canal Company.

The company was formed in 1881. In June 1884 we were furnished by M. de Lesseps with the financial condition of the undertaking up to June 1883. We do not pretend to transcribe literally M. de Lesseps' very meagre statement, but taking his own figures as our basis, we will collate them with well-known facts, and show in our own way, and as clearly as possible, what the condition of the Panama Canal Company was in June 1883.

In that month the financial position of the concern was as follows:

Estimated cost, as per M. de Lesseps  . . £24,000,000

*Raised up to June 1883:*—

50 per cent. on 590,000 shares of 500f. . 5,900,000

Realized on 250,000 debentures of 500f. issued on September 7, 1882, at 437.50 4,375,000

Actual cash received . . . . . . . . . . £10,275,000

*To be added:*—

Value of 10,000 paid-up shares to concessionaires . . . . . . . . . . 200,000

Rebate on the Five per Cent. Debentures

250,000 x 62.50 . . . . . . . . . . . . 625,000

Total liabilities incurred . . . £11,100,000

Less cash in hand and moneys due from correspondents . . . . . . . . . . 2,320,000

Total net cash spent . . . . . . . £8,780,000
Thus in 1883 the company had used about 37 per cent. of its estimated cost.

Let us now see how, in June 1883, that sum of £11,100,000 had been disposed of.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary expenses, with &quot;propaganda&quot; of M. de Lesseps and his immediate friends, &amp;c.</td>
<td>£904,000</td>
</tr>
<tr>
<td>Paid-up shares to concessionaires</td>
<td>£200,000</td>
</tr>
<tr>
<td>Cash to concessionaires</td>
<td>400,000</td>
</tr>
<tr>
<td>&quot;Comité Américain&quot; (really a corruption fund)</td>
<td>480,000</td>
</tr>
<tr>
<td>Rebate on Five per Cent. Debentures, September 1882</td>
<td>625,000</td>
</tr>
</tbody>
</table>

Total spent, not including cost of a single pickaxe, nor of excavation of a single cube: £2,409,000

To be added:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panama Railway—68,534 out of 70,000 shares</td>
<td>3,755,000</td>
</tr>
<tr>
<td>Company's offices in Paris, including furniture, &amp;c.</td>
<td>72,800</td>
</tr>
<tr>
<td>Company's offices in Panama, including furniture, &amp;c.</td>
<td>227,200</td>
</tr>
<tr>
<td>Financial service on shares and debentures for 1882–83</td>
<td>880,000</td>
</tr>
<tr>
<td>(For 1881–82 we have no exact data.)</td>
<td></td>
</tr>
<tr>
<td>Administration for 1882–83 in France and Panama</td>
<td>248,000</td>
</tr>
<tr>
<td>Probable expenses with finances (interest, &amp;c.) and administration up to June 1882</td>
<td>400,000</td>
</tr>
</tbody>
</table>

Carry forward: £7,972,000
THE PANAMA CANAL.

Brought forward . . . . £7,972,000
Expenses with the works of the canal proper:—
   Machinery, tools, buildings £640,000
   Other expenses (salaries, &c.) 152,000
   ——— 792,000
Cash on hand . . . . . . . . . . . . £11,104,000

Thus in about fifteen or sixteen months M. de Lesseps had managed to spend in round figures upon—

Preliminary administration and financing expenses . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ..
The Panama Railway was acquired at a price that leaves the Canal Company a deficit of about £60,000 a year beyond the service of the loan raised for the purchase. Considering the usefulness of the road to the company, and its having the right of way in Panama, the purchase, however, was wise.

The material which the company had acquired, and already in the isthmus, consisted of 4 dredges, 10 scows, 18 excavators, 29 locomotives, 15 remorqueurs, 10 portable steam-engines, 42 kilometres of rails (for 30 kilometres of railway), 190 waggons for Panama Railway, 561 excavation waggons. Besides these, the company had ordered 1 dredge, 52 boats, 46 excavators, 69 locomotives, 1,190 waggons of all classes, 43 kilometres of rails, and 7 portable engines, all of which were then in construction. Not a great deal indeed for the enormous amount of money which had already been spent.

Thus, in July 1883 there were 1,103,703 metres excavated, out of a total now fixed at between 125,000,000 and 150,000,000; and there was hardly enough material to commence the works vigorously.

At that date any man might already see that it was impossible that the canal should cost only £24,000,000.

The expense already incurred was, roundly £8,800,000

Adding to that: 124,000,000 cubic metres

at the low average of 6s. . . . . 37,200,000

The cost, it is evident, would greatly surpass the total put down by M. de Lesseps. In July 1883 any one could see that the price of mere excavation alone—supposing the total amount to be 125,000,000 cubic metres—would be 50 per cent. more than the whole sum put down by M. de Lesseps as the ultimate cost of the canal, which, we repeat, was but £24,000,000.
Such was the condition of the company in June 1883. Let us now see what money has been raised since.

On September 15, 1883, M. de Lesseps asked for 300,000,000 francs at 3 per cent. in 500 francs debentures, to be issued at 285 francs. He issued £12,000,000 in obligations, which brought him £6,840,000, the payment being extended over nearly one year. At the price of issue these debentures yield a revenue of 5½ per cent., and as they are redeemable at par there is a bonus of £8 12s. per debenture. The subscription was open on October 3, and met with great success.

On September 25, 1884, M. de Lesseps applied for another loan, this time for £5,160,000, or 129,000,000 francs, in Four per Cent. Debentures, redeemable at par in sixty-five years. The interest of 16s. per annum per debenture, having in view the price of issue (which was 333½ francs), is equal to 6 per cent. per annum.

So that in September 1884 the company had raised—

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 per cent. on 590,000 shares</td>
<td>£5,900,000</td>
</tr>
<tr>
<td>5 per cent. loan of September 7, 1882</td>
<td>4,375,000</td>
</tr>
<tr>
<td>3 per cent. loan of October 3, 1883</td>
<td>6,840,000</td>
</tr>
<tr>
<td>4 per cent. loan of September 25, 1884</td>
<td>5,160,000</td>
</tr>
</tbody>
</table>

Making a total of £22,275,000

This, we repeat, is merely **cash raised**, and not the total sum for which the company is liable. That sum is as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 per cent. on share capital</td>
<td>£5,900,000</td>
</tr>
<tr>
<td>Loan of 1882</td>
<td>5,000,000</td>
</tr>
<tr>
<td>Loan of 1883</td>
<td>12,000,000</td>
</tr>
<tr>
<td>Loan of 1884</td>
<td>7,747,740</td>
</tr>
</tbody>
</table>

Total: £30,647,740
The interest that the company is paying for this capital is as follows:

<table>
<thead>
<tr>
<th>Interest Rate</th>
<th>Capital Amount</th>
<th>Amount Paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 per cent.</td>
<td>£5,900,000</td>
<td>£295,000</td>
</tr>
<tr>
<td>5 per cent.</td>
<td>£5,000,000</td>
<td>250,000</td>
</tr>
<tr>
<td>3 per cent.</td>
<td>£12,000,000</td>
<td>360,000</td>
</tr>
<tr>
<td>4 per cent.</td>
<td>£7,747,740</td>
<td>309,909</td>
</tr>
</tbody>
</table>

Total interest: £1,214,909

Adding half of 1 per cent. on loans for amortization: 123,369

Total annual charge: £1,338,278

That is the total sum that has been raised, and the interest and amortization charged on it.

We have to wait until July 1885 in order to obtain an idea of the finances of the company, with some detail, up to June 1884. Since June 1884 the only data that M. de Lesseps has given out to his shareholders as to the condition of his company are those contained in the short statement which accompanied his circular of September 5, 1884, previously to the issue of the 387,387 Four per Cent. Debentures, just referred to. But the statement does not say anything that would throw light on the real condition of the company; it contents itself with showing what are its resources, which are placed at £9,320,000, or £3,420,000 were in cash, and £5,900,000 in the uncalled 50 per cent. on the shares.

Let us now see what is the probable position of the company at present, and its prospects for the future.

In his statement made in September 1884 M. de Lesseps said that he had in cash at that time £3,418,400. Now, he had raised up to that time the following sums, including the loan issued in that month:
50 per cent. on shares : £147,500,000 or £1,500,000
Loan of 1882 . . . : £125,000,000 " 5,000,000
Loan of 1883 . . . : £300,000,000 " 12,000,000
Loan of 1884 . . . : £193,692,500 " 7,747,700

Total . . . : £766,192,500 or £30,647,700

In the issues of debentures, amounting altogether to £618,692,500, there had been a rebate of £201,218,295; so that the company only realized £417,474,205, or £16,698,968, which, added to the £5,900,000 of the called-up share capital, makes up £22,598,968, which represents the available net cash resources placed at the disposal of M. de Lesseps up to September 1884 inclusive.

In order to express a judgment as to the prospective condition of the company when the canal will be thrown open: supposing that the Chagres will offer no insurmountable difficulty, and that money will be forthcoming whenever M. de Lesseps asks for it—in short, that everything will run smoothly for him: we must first find what is the amount of work left undone in September 1884, and add its cost, together with the cost of finding the money and interest, administration, &c., to the above £30,647,700, less whatever he had in hand in that month.

In the beginning of it M. de Lesseps had raised altogether £572,500,000, or £22,900,000, of which he had still in cash £3,418,000, and therefore the total amount issued and spent, or disposed of, was £19,482,000. During the month M. de Lesseps issued his loan for £7,747,700, which added to that balance on hand, makes the total gross amount at his disposal at the end of September 1884, £11,165,700.
THE FINANCES OF THE COMPANY. 167

Now, in September of last year there were still to be disposed of no less than 116,905,420 cubic metres of excavations. The excavations hitherto done are among the easiest; and yet, in face of repeated promises of M. de Lesseps to have 2,000,000 cubic metres a month, the average for the first (and best) five months of this year (1885) has been 668,000 metres per month, or 8,000,000 a year. In the opinion of experts who have visited the isthmus, the company is now removing as much earth and rock as it will ever remove. M. de Lesseps has had all the money required, and he boasts that he finds easily any thousands of labourers he may require; in fact, he bewilders us with the large multitude of workmen he now employs. However, we will assume that the total excavation henceforth will be increased by 50 per cent. beyond its amount in the past.

Let it not be supposed that anything like that increase is to be expected. A year ago some wonderful increase had been promised—from 210,000 metres a month to 2,000,000 (see pages 122 and 128). We have just seen that the average in the first five months of 1885 has been only 668,000 a month, and from the table in page 126 our readers may see that the average for the five months April to August of last year (1884) was 654,472 metres; so that there has been hardly any increase in the work since last year.

However, we will assume that M. de Lesseps will be able for the future to take away the annual average of 12,000,000 metres, beginning from September 1884. As at that time there were 116,905,420 metres to be disposed of, it follows that there will be work for nine years and nine months, commencing from September last.

We will now calculate what will be the position of the
company at the end of that period of construction. Let us see how much the canal will have cost.

Raised and disposed of up to September 1884

Cash on hand, same month. £3,418,000
Fresh loan, ditto (nominal). 7,747,700

Resources in Sept. 30, 1884 £11,165,700

**Expenses to finish the Canal:**

(a) *Excavations*: 116,905,400 c.m. at even such low price as 5s. each £29,221,355

(b) *Other works*: subsidiary channels, Chagres problem, improvements in Panama and Aspinwall, as low as 8,000,000

(c) *Interest* on sums already raised in Sept. last, or £1,333,647 per annum for 9½ years 13,051,806

(d) *Administration* in Paris and at the Isthmus, £320,000 a year 3,120,000 16,171,806

The works, interest on sums already issued, and administration, will require £53,393,000 in cash. With the discount at which the debentures will be issued, that total will be raised to £72,400,000.

Carry forward  £72,875,161
Brought forward . . . £72,875,161

Other Expenses:

(e) Discounts, premium, and expenses of issuing new capital: say 40 per cent. on £53,400,000, less the £5,900,000, the uncalled amount on shares, on which there will be no discount, or 40 per cent. on £47,500,000 . . . 19,000,000

(f) Interest and amortization on sums to be raised (£72,400,000), say 5½ per cent. for four full years on the whole sum . . . . . . . . 15,928,000

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingent expenses in our calculation</td>
<td>£000,000,000</td>
</tr>
<tr>
<td>Gross sum still to be raised</td>
<td>77,155,461</td>
</tr>
<tr>
<td>Gross sum already raised</td>
<td>30,647,700</td>
</tr>
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Let us see now what will be the financial outlook of the company. And here we have first to consider the expected traffic of the canal.

The Paris Congress took as the basis 6,000,000 tons, but it seems to us that there is exaggeration in that estimate. Here is an instance of it.

At the Congress of 1879, Admiral Ammen, U.S.N., presented a paper (prepared by the Bureau of Statistics of Washington) showing that the movement between the Atlantic and Pacific coasts of the United States, and
the commerce of the latter country with all nations or colonies in the Pacific comprised 971,455 tons only, whereas Mr. Szarvady at the same time was "demonstrating" that there were 3,443,000 tons, which number M. Levasseur consented to lower to 2,000,000 by a process of figuring which is only too analogous to that of all the figuring of this Panama Canal business.

In order to show how curiously these figures were handled it is enough to mention the fact that M. Levasseur, the reporter of the committee on statistics, gravely said (Compte Rendu, page 78) that "M. Mendes Leal (the Portuguese Minister in Paris), an exposant la situation commercial du Brésil a témoigné de l'intérêt que le grand Empire de l'Amérique du Sud avait aussi au percement de l'isthme." Now, Senhor Mendes Leal, whose exposé is published alongside, does not say any such nonsense; for Brazil, indeed, has no interest whatever in the canal; on the contrary, her interest is the other way. Vessels going to the west coast of South America and to the Cape of Good Hope now pass by Brazil; henceforth they will not. Brazil has no direct trade with Australia, and has hardly any with California.

In the second place the number of tons is not so important to our purpose as the reasonableness or unreasonableness of the dues. At the Congress of 1879 M. Gauthist, Secretary of the Society of Commercial Geography, brought to its notice that while a ship of 4,500 tons would pay only 45,000f. to pass the Suez Canal, she would be required to pay 120,000f. according to the tariff proposed by M. Wyse and Colombia,—nearly three times as much.

Now, can the Panama Company maintain that high tariff and attract the 3,000,000 or 6,000,000 tons, as the case may be? Every one is aware of the extreme com-
petition in prices of all leading products, and there are products, such as the guano, the phosphates and nitrates, and the copper of Peru and Chile, that are stated by eminent authorities not to be able to bear the 15f. tonnage by the canal. They are goods that may as well be transported in sailing vessels.

And we must not forget that the Panama Company is placing too exaggerated a reliance on the growth of California, so far as business by the canal is concerned. The official publications speak of the growth of California as if the exports from that State were entirely dependent on water transportation.

M. de Lesseps forgets, so far as the United States are concerned, that there are numerous lines of railway competing with each other and carrying goods from the West to the Atlantic coast at ridiculously low rates, and, as Mr. Edward Atkinson has just shown in his latest publication, the tendency is towards a still further reduction in the tariffs.

However, allowing 5,000,000 tons for the business of the canal, and admitting the high price of 12s. per ton, as it has been proposed, the company would have an annual revenue of £3,000,000. Let us see now what charges will have to be deducted:

\[
\begin{align*}
\text{51} \text{2 per cent. on } &\mathbf{\£107,903,000} \text{ for interest} \\
\text{and amortization} & \text{ } 5,934,000 \\
\text{Running expenses, say} & \text{ } 400,000 \\
\text{Revenue} & \text{ } 6,334,000 \\
\text{Annual deficit} & \text{ } 3,334,000 \\
\end{align*}
\]

Even 10,000,000 tons would not pay expenses and the fixed charges on the capital, with shares and debentures
That seems to us to be the best possible showing for M. de Lesseps, and that is, we once more repeat, assuming that the difficulties of holding the Chagres at the height, during great freshets, of 100 feet above the canal, do not prove to be, as stated by impartial experts, truly insurmountable; for we really think that the annual deficiency of £3,300,000 is not so important as the Chagres, which may in twenty-four hours destroy nearly all the work of the canal, or, at the very best, may require a tremendous annual outlay in dredging the canal from the detritus brought by it with the force of a tropical torrent.

Such, we think, is the financial outlook of the Panama Canal Company. Is it pleasant to contemplate?
CHAPTER XIV.

POLITICAL QUESTIONS.—NO. I. "THE MONROE DOCTRINE."

Paramount interest of the United States in the canal.—Control of the canal the settled policy of that Government.—The Clayton-Bulwer treaty an exception that proves the rule.—The Monroe doctrine, its English origin.—Opinion of the Saturday Review.—Jackson and the King of the Netherlands.—The treaty of 1846–8 between the United States and Colombia, its principal provisions.—Instances in which America has intervened.—The new treaties proposed in 1868 and 1869: their political provisions.

Our task with the study of the Panama Canal enterprise may be considered at an end, since we reviewed its financial prospects in our last chapter. But, as we said at the start, the consideration of this question of inter-oceanic communication would be incomplete without our taking into account its political bearings, and that is what we now propose to do. The matter is deserving of a long and detailed study, which, we regret to say, is alien to our present purpose in these pages. We shall have to rest contented with pointing out the various utterances of the United States and of Great Britain at different times; considering these political chapters merely as incidental to the main work of studying how the Panama Canal Company was formed, how it is working, and how it will probably end.

Whether this Panama Canal of M. de Lesseps fails or is completed under French auspices, the Government of the United States is bound, by the enormous interests of
what may be truly described as its Pacific empire, to try
and obtain the preponderating control in it; and if that
aim should be found to be difficult or impossible, then
we think that that Government will try to construct
another canal under its own absolute control.

The idea of having a canal under its own control has
been more or less a fixed one in the history of the
Government. The Clayton-Bulwer treaty is an exception,
and, rightly or wrongly, the United States maintain that
England has broken that treaty. And if England insists
that the treaty is still in force, it is claimed that nothing
can prevent the United States from arranging for its
formal revocation; for indeed, whether the treaty is in
force or is not in force, it seems certain that the United
States Government do not want any "joint" or
"multiple" control, which even here in Europe is the
source of so many troubles.

It is common in Europe to laugh at the pretensions of
the so-called "Monroe doctrine;" and to assert that the
United States cannot get rid of the Bulwer-Clayton
stipulations; and that the only way to get clear of all
the difficulties is to neutralize the canal of Panama or
any other American canal by the joint guarantee of all
the Powers. We will try to show that those ideas are
unwelcome, and indeed should be unwelcome, to America,
and have as a rule been so from 1823 up to 1884, when
the authorities at Washington negotiated a new treaty
for building through Nicaragua a canal that should be
under their own control.

We may at once begin by stating that it is the settled
policy of the United States to have, as President Hayes
said in 1880, "a canal under American control. The
United States cannot consent to the surrender of this
control to any European Power, or to any combination of
European Powers. . . . No European Power can intervene,” for protection of capital of its citizens, “without adopting measures on this continent wholly inadmissible.”

This is no new theory. It is but a development of the well-known “Monroe doctrine,” thus called because it is not a principle of international law, but a doctrine which such a powerful nation as the United States is bound to enforce, and will enforce, should occasion arise.

Soon after the purchase of the Wyse concession by M. de Lesseps, such a Conservative paper as the Saturday Review, which is never over-favourable to anything concerning the United States, wrote on July 19, 1879, in relation to the canal, the following very just remarks: “According to old rules of international law, there is no reason why the United States should claim a special concern in an undertaking which will be carried on at a distance of 1,000 miles from the nearest point of its territory; but the Americans have on former occasions successfully asserted a primacy on their own continent which they are strong enough to maintain. Napoleon III., in the apparent height of his power, was compelled, by the mere remonstrances of the American Government, to withdraw his army of occupation from Mexico, and no private adventurer will be allowed, without the permission of the United States, to prosecute an enterprise on American soil which may involve political consequences. The canal is to be placed under the protection of the Government of Colombia, which may perhaps not always be able to guarantee the security of the works, and which can certainly not maintain its own independence against any considerable foreign Power. In his former undertaking M. de Lesseps was only prevented by the vigilance of Lord Palmerston from obtaining possession of a considerable territory in Egypt, which
would have become a colony and dependency of France. At a later time he threatened, by his own authority, to close the canal after it became the highway between Europe and Asia. A European proprietary under a vigorous chief might soon become practically independent of a petty South American Government. Those who are interested in the commercial success of the Darien Canal will act wisely in making early arrangements with the Government of the United States. . . . . It is more likely that the United States may obtain an undue preference in the use of the canal than that they will suffer from a European intrusion. If capital is forthcoming for the work, and if M. de Lesseps is justified in his belief that it is both practicable and easy, no time ought to be lost by the Governments of Europe in concerting measures with the United States for free and equal use of the canal. The application and frequent extension of the so-called Monroe doctrine may as well be recognised because it cannot be resisted. The precedent of Mexico is conclusive as to the power of the United States, and plausible arguments may be urged in favour of the justice of the claim. The semi-barbarous Governments of Mexico and Central America cannot become rivals for supremacy in the Western hemisphere; and the Americans contend that the vicinity of any more powerful neighbour might compel them to undergo the burden of maintaining an army on the European scale. They have for the present ceased to covet extension of territory, but they insist on the exclusion of European influence from the petty states beyond their Southern border."

These words are eminently apposite and wise. The "Monroe doctrine" is not a mere sentiment; it is rather the settled policy of a continent powerful enough to enforce it. It is impossible to imagine the
enormous interests of the United States at the mercy of the protection afforded by Colombia or by European Powers bound up in some treaty. Every one knows that the most solemn compacts for the settlement of the greatest European questions have been torn to shreds at the breaking out of war, and even without war. What Russia did in 1870 is what Great Britain was preparing herself to do in the Bosphorus should the late difficulties with that Power have culminated in war a few weeks ago. Treaties are grand things in smooth and normal times; when, however, they are most to be enforced they are torn to pieces at a moment's notice.

The so-called "Monroe doctrine," strange as it may appear, owes its origin indirectly to an English statesman, and next to him, not to Mr. Monroe, but to his Secretary of State, Mr. John Quincy Adams.

When the Spanish provinces in America revolted against the rule of the mother-country, and succeeded in checking the attempt of Spain to retain them under her dominion, President Monroe, in his Message to Congress on March 8, 1822, declared that those provinces "ought to be recognized." In July 1823 Mr. John Quincy Adams, Secretary of State, in a letter to Mr. Middleton, declared that the claim then pressed by Russia to possessions in the north-western coast of North America was not conducive to the peace of the world. "With the exception of the British establishments north of the United States, the remainder of both the American continents must henceforth be left to the management of American hands."

At the same time Mr. Adams said, in a despatch to Mr. Rush, American Minister in London:—"The application of colonial principles of exclusion therefore cannot be admitted by the United States as lawful upon any part
of the north-west coast of America, or as belonging to any European nation."

A month later on, Mr. Rush wrote to Mr. Adams that in an interview with Mr. Canning, the British Foreign Minister, he (Rush) having referred to a note of the Foreign Office to the British Ambassador in Paris, in which England disclaims all intentions to interfere in the late Spanish possessions in America, and expected also that France would make no attempt to bring them under her dominion, Mr. Canning proposed to him a concerted action between the two Governments, and protested that Great Britain would never again lend her aid towards bringing the colonies under the rule of Spain.

Still, a month later on (in August 1823), Mr. Canning, in a private and confidential note to Mr. Rush, sets forth his views in a more distinct form. He does not disguise the fact that the recovery of the colonies by Spain was hopeless, and that, although the recognition of them as independent States was a matter of time and circumstances, England "could not see any portion of them transferred to any other Power with indifference." Mr Canning was really afraid of the intentions of France. Mr. Rush on his part answered that he "would regard as highly unjust and fruitful of disastrous consequences any attempt on the part of any European Power to take possession" of those colonies, "by conquest or by cession, on any ground or pretext whatsoever."

It was only three months later on that President Monroe, in his annual Message to Congress, dated December 2, 1823, giving an account of the claims of Russia on the north-west, and of Spain on her late colonies, declared that "the occasion had been judged
THE MONROE DOCTRINE.

proper for asserting, as a principle in which the rights and interests of the United States are involved, that the American continents, by the free and independent condition which they have assumed and maintained, are henceforth not to be considered as subjects for future colonization by any European Powers.” Alluding then to the proposed interference of the allied Powers on behalf of the Spanish dominion over her late colonies, the President declared that “it is equally impossible, therefore, that we should behold such interposition in any form with indifference.”

In January 1824 Mr. Canning, upon hearing the declaration of principle by Mr. Monroe, declined to act conjointly with the United States, because, said Mr. Rush in his dispatch of the 9th of that month, Great Britain does not accede to the principle adopted by the United States of not considering the American continents as subjects for future colonization by any of the European Powers. On the contrary, on August 12, 1824, Mr. Rush again notifies his Government, “that Great Britain considered the whole of the unoccupied parts of America as being open to her future settlements in like manner as heretofore.”

The “Monroe doctrine” had thus originated in the attempt, first of France and then of the allied Powers, to restore the revolted provinces of Spain in America to the Spanish yoke. But while England did not want to see France taking advantage of Spanish weakness, neither did she agree to the assertion of the United States, that Europe should not look any more to America as a further field of colonization in any form.

A “doctrine” is not enforced by international law; and the Monroe declaration, it must be confessed, has been more respected than a principle. European nations
may have protested against it, but the fact is, that they have not dared to act against it except in a few instances in which they got worsted, or they have withdrawn their claims in the end.

We will now show how that doctrine has been consistently repeated, and how, in pursuance of its enforcement, the United States Government has several times tried to control in a direct way the interoceanic communication. We have already spoken of the attempts to build the canal independently of the political phases of the question; we shall now deal exclusively with political facts, and show what the United States have been doing in Colombia and Nicaragua, after which we hope to dwell specially on the Clayton-Bulwer treaty that, as an exception—a very striking exception—to the settled American policy, corroborates the main principle of exclusion of European domination on the isthmus consecrated by Monroe.

We have already referred to the attempt of the King of the Netherlands to patronize the building of a canal across the isthmus, and the declaration of Secretary Livingston, dated July 20, 1831. The scheme, however, miscarried. President Jackson, under whom that secretary served, sent to Congress in 1838 a long report about the affairs of the isthmus, which was the basis of the long report of Mr. Mercer, dated March 3, 1839, of which the keynote is contained in the following sentence:—“The United States, whose territory extends from the Atlantic to the Pacific, cannot but regard with solicitude any enterprise which, if practicable, will so greatly approximate their eastern and western frontiers.” Mr. Mercer’s idea was not to secure an exclusive control for the United States, but free and equal right of navigation to all nations on the payment of proper tolls. It
was then that Jackson sent Biddle to the isthmus, as we have already stated in a previous chapter.

Although the diplomatic correspondence of the United States is almost silent on canal affairs for the next seven years, the subject was not allowed to drop, and we are next confronted with a most important treaty, which by itself was a strong declaration of policy. We refer to the treaty with New Grenada, now the United States of Colombia, dated December 12, 1846, but ratified on June 10, 1848. By this treaty the United States secure the right of transit by the Isthmus of Panama, and in compensation "the United States guarantee positively and efficaciously to New Grenada by the present stipulation the perfect neutrality" of the isthmus. The stipulation is important in canal politics, and we will transcribe here the whole Article XXXV. of the treaty containing it.

"The United States of America and the Republic of New Grenada, desiring to make as durable as possible the relations which are to be established between the two parties by virtue of this treaty, have declared solemnly and do agree to the following points:—

"1st. For the better understanding of the preceding articles, it is and has been stipulated between the high contracting parties that citizens, vessels, and merchandize of the United States shall enjoy in the ports of New Grenada, including those of the part of the Grenadian territory generally denominated Isthmus of Panama, from its southernmost extremity until the boundary of Costa Rica, all the exemptions, privileges, and immunities concerning commerce and navigation which are now or may hereafter be enjoyed by Grenadian citizens, their vessels and merchandize; and that this equality of favours shall be made to extend to the passengers, correspondence, and merchandize of the United States in their transit across the said territory from one sea to the other. The Government of New Grenada guarantees to the Government of the United States that the right.
of way or transit across the *Isthmus of Panama*, upon any modes of communication that now exist or that may be hereafter constructed, shall be open and free to the Government and citizens of the United States, and for the transportation of any articles of produce, manufactures, or merchandize, of lawful commerce, belonging to the citizens of the United States; that no other tolls or charges shall be levied or collected upon the citizens of the United States, or their said merchandize thus passing over any road or canal that may be made by the Government of New Grenada, or by the authority of the same, than is, under like circumstances, levied upon and collected from the Grenadian citizens; that any lawful produce, manufactures, or merchandize belonging to citizens of the United States, thus passing from one sea to the other, in either direction, for the purpose of exportation to any other foreign country, shall not be liable to any import duties whatever; or, having paid such duties, they shall be entitled to drawback upon their exportation; nor shall the citizens of the United States be liable to any duties, tolls, or charges of any kind to which native citizens are not subjected for thus passing the said isthmus. And, in order to secure to themselves the tranquil and constant enjoyment of these advantages, and as an especial compensation for the said advantages, and for the favours they have acquired by the fourth, fifth, and sixth articles of this treaty, the United States guarantee positively and efficaciously to New Grenada, by the present stipulation, the perfect neutrality of the before-mentioned isthmus, with the view that the free transit from the one to the other sea may not be interrupted or embarrassed in any future time while this treaty exists; and, in consequence, the United States also guarantee, in the same manner, the rights of sovereignty and property which New Grenada has and possesses over the said territory."

Prior to 1846 the policy of the United States had been to obtain free passage for its citizens and merchandize on equal footing with all other nations, and to
THE MONROE DOCTRINE.

prevent any one getting the preponderating influence on the canal. Now, that policy became accentuated, and that Government went further than it had ever gone before; that is to say, it agreed to guarantee in a positive and efficacious manner the perfect neutrality of Colombian territory.

In virtue of that treaty, the United States have been called upon to interfere in the isthmus several times, principally in 1856, 1862, 1864, 1865, and 1885. In 1856 there was a riot in Panama, which the Colombian Government could not or would not repress. The Secretary of State, Mr. Marcy, explained that the local government at Panama was thoroughly incompetent to protect the transit of the isthmus, and he dispatched a mission to Bogota for the purpose of negotiating a new treaty. In his instructions to the negotiators the Secretary explains the chief points of the projet of the convention that was to be urged upon Colombia. He proposed that a district of country twenty English miles in width, equidistant, or nearly so, from the line of the Panama Railway, from ocean to ocean, and including Aspinwall and Panama, should be under the exclusive jurisdiction of two municipalities to be created, Colombia to retain a nominal sovereignty—the municipalities to govern themselves, and guarantee right of suffrage, religious freedom, and trial by jury. Colombia was to agree to pay indemnification for losses of life and property in the riot of April 15, 1856; and, on the other hand, was to cede to the United States several islands in the harbour of Panama, including that of Taboga, in consideration of which the latter Government would pay Colombia a sum to be agreed upon. Furthermore, it was proposed that the United States were to have in regard to the Panama Railway Company all the right and authority in and over the said road that
Colombia had at any time enjoyed, they having also the right of modifying or extending the charter, and to make any agreement with it in relation to the use of the said railway. The projected treaty was unacceptable to Colombia, and was not pressed.

In June 1862 the Colombian Minister at Washington applied to the Government of the United States, then engaged in the tremendous civil war with its own Southern States, to prevent Mosquera, a revolutionary chief, from subverting the Colombian Confederation. The President instructed the American naval commander at that port to protest, and guarantee at all hazards, and at whatever cost, the safety of the railway transit across the isthmus. But the Colombian Minister asked for the interposition of land forces, especially some cavalry.

Mr. Seward, Lincoln's Secretary of State, did not comply at once with the request. The country at the time being in danger from an internecine war, and from foreign, principally English and French, ill-will if not open enmity, the Secretary departed from the true line of policy of his country, and instructed the Ministers in London and Paris to consult with the British and French Governments as to the probable occupation, and even inviting their co-operation. Mr. Seward was anxious to show to those two Governments that he wanted to avoid taking special advantages in Colombia, and thus excite their hatred for the United States to the point of open hostilities at a time when, without such hostilities, the safety of the Union was in great danger. Both Governments, while promising co-operation should the necessity arise, contended that thus far they did not see any such necessity; and here the matter dropped.

In 1864, Spain, then at war with Chili and Peru,
wanted to force war material into the isthmus *in transitu* to the South Pacific. The United States' interference was invoked by Colombia, whose neutrality was thus threatened, and although the necessity for intervention ceased, the Attorney-General gave it as his opinion that it should, if necessary, be granted.

Then again, in 1865, the intervention of the United States was asked for by Colombia for putting down a revolution, which that Government, however, refused, as the transit had not been impeded, and as the guarantee applied only as against foreign enemies and not against internal troubles.

The intervention in 1884–5 is too recent to need any comments.

In 1866, as we have already stated in a previous chapter, it was thought necessary to enter into some treaty with Colombia for the surveys and studies of a canal to be built under the auspices of the United States, and in 1868 the negotiations were opened by Mr. Seward. In February 1869 one of the last important acts of President Johnson was to send to the Senate the treaty of Bogota, of January 14, as arranged between the plenipotentiaries. The tariff in the canal was to be on a basis of perfect equality for all nations. Colombia was to retain her political sovereignty over the canal and her territory, but she was to guarantee to the United States the peacable enjoyment, control, and direction of it. The United States were to have the right to use the canal for the passage of troops, munitions and vessels of war in time of peace; in time of war the canal to be closed to troops, vessels, and munitions of the belligerents. This treaty was not ratified by the Senate at Washington.

In 1869 another effort was made to negotiate an
acceptable treaty, through Minister Hurlbut, who signed, on January 26, 1870, the new treaty of Bogota, which General Grant submitted to the Senate on March 31 following. It consents that the United States shall make the necessary explorations.

Art. III. reads thus: "Nothing contained in the two preceding articles shall be understood to mean that the United States of Colombia will forbid other explorations within her territories which may be undertaken for the same purpose, . . . . but only that they will decline to make any concession whatever for the excavation of such canal to any except to the United States of America, until the latter party shall have declared that they considered the work impracticable, or the term of three years, expressed in Art. XXIV., shall have expired without the United States of America having declared their determination to commence the works."

Both parties reserved the right of passing their ships of war at all times, but the canal will be closed against the flag of all nations which may be at war with either of the contracting parties.

Art. XXV. provides that both parties mutually agree to use all efforts to obtain from other nations a guarantee in favour of the stipulations of immunity and neutrality mentioned in Art. XI., and also in favour of the sovereignty of Colombia over the isthmus; and the United States for their part recognise and renew the stipulations in regard to same guarantee contained in Art. XXXV. of the treaty of June 10, 1848. Those nations which, by treaties entered into with Colombia and the United States, shall unite in the guarantee of the neutrality of the canal, and of sovereignty over the territory, were to be relieved from tonnage over their ship of war.
By Art. XI., alluded to, the United States guarantee to Colombia that the canal and its dependencies shall be exempt from all hostile acts from other nations, and shall ally themselves to Colombia to aid in repelling any such acts at their own expense.

Such were the principal provisions of a treaty that does honour to its negotiators. But upon being submitted to the Colombian Legislature it was subjected to so many amendments as to become unacceptable to the United States.

What Colombia wanted was a joint protectorate over the canal, all nations having equal control with the United States. Answering a memorandum from Minister Hurlbut in which that idea was ventilated, the Secretary of State, Mr. Hamilton Fish, said in a note to him, dated Sept. 4, 1869: "In the present state of international law, such joint protectorate would be the source of future trouble, . . . . and might probably prove an obstacle to the ratification by the United States Senate of a treaty on the subject."

Mr. Fish expounded the true American doctrine—that a canal at the very door of the United States should not be under joint protectorate with European nations whose interests in it are so different and so remote as compared with those of the United States.

The principal modification made by the Colombian Congress was an addition to Art. XI. excluding both parties, when at war with any other nation, from exercising the rights of belligerents within the limits of the canal and dependencies, except when such nation had not joined the guarantee of neutrality of Colombia.

In the Wyse Concession of 1878, Colombia expressed her views more fully. The political articles of that concession are as follows:
"Art. V.—The Government of the Republic hereby declares the ports at each end of the canal, and the waters of the latter from sea to sea, to be neutral for all time; and consequently, in case of war among other nations, the transit through the canal shall not be interrupted by such event, and the merchant vessels and individuals of all nations of the world may enter into said ports and travel on the canal without being molested or detained. In general, any vessel may pass freely without any discrimination, exclusion, or preference of nationalities or persons, on payment of the dues and the observance of the rules established by the company for the use of the canal and its dependencies. Exception is to be made of foreign troops, who shall not have the right to pass without permission from Congress, and of the vessels of nations who, being at war with the United States of Colombia, may not have obtained the right to pass through the canal at all times, by public treaties wherein is guaranteed the sovereignty of Colombia over the Isthmus of Panama and over the territory wherein the canal is to be cut, besides the immunity and neutrality of the said canal, its ports, bays, and dependencies, and the adjacent seas.

"Art. VI.—The United States of Colombia reserve to themselves the right to pass their vessels, troops, ammunitions of war at all times, and without paying any dues whatever. The passage of the canal is strictly closed to war vessels of nations at war with another or other nations, and which may not have acquired, by public treaty with the Colombian Government the right to pass by the canal at all times."

The two provisions above quoted are most objectionable to the United States. Colombia, the protegé of that Government, according to the treaty of 1846-48, did not consult with it before granting the concession. Imagine the United States asking permission of the Colombian Congress, at a distance of fifteen days' trip from Panama, to pass a few troops from New York to California! The idea of the French and of Colombia
is to place the canal under the joint protection of all Powers which will acknowledge the sovereignty of Colombia over the isthmus, as well as the neutrality of the canal and of the adjacent seas. Such an idea may be very acceptable to Europe; but it is entirely inadmissible by the United States, and the reasons are to be found in the special message sent by President Hayes to Congress on March 8, 1880 (when M. de Lesseps was visiting Washington), to which we have already alluded, and the declarations of which we will now transcribe in full:

"The policy of this country is a canal under American control. The United States cannot consent to the surrender of this control to any European Power, or to any combination of European Powers. If existing treaties between the United States and other nations, or if the rights of sovereignty or property of other nations stand in the way of this policy—a contingency which is not apprehended—suitable steps should be taken by just and liberal negotiations to promote and establish the American policy on this subject, consistently with the rights of the nations to be affected by it.

"The capital invested by corporations or citizens of other countries in such an enterprise must in a great degree look for protection to one or more of the great Powers of the world. No European Power can intervene for such protection without adopting measures on this continent which the United States would deem wholly inadmissible. If the protection of the United States is relied upon, the United States must exercise such control as will enable this country to protect its national interests and maintain the rights of those whose private capital is embarked in the work.

"An interoceanic canal across the American isthmus will essentially change the geographical relations between the Atlantic and Pacific coasts of the United States, and between the United States and the rest of the world. It will be the great ocean thoroughfare between our Atlantic
and our Pacific shores, and virtually a part of the coast line of the United States. Our merely commercial interest in it is greater than that of all other countries, while its relations to our power and prosperity as a nation, to our means of defence, our unity, peace, and safety, are matters of paramount concern to the people of the United States. No other great Power would, under similar circumstances, fail to assert a rightful control over a work so closely and vitally affecting its interest and welfare.

"Without urging further the grounds of my opinion, I repeat, in conclusion, that it is the right and the duty of the United States to assert and maintain such supervision and authority over any interoceanic canal across the isthmus that connects North and South America as will protect our national interests. This I am quite sure will be found not only compatible with, but promotive of, the widest and most permanent advantage to commerce and civilization."

The resolution offered in the Senate by Senator Burnside, of Rhode Island, of which we have spoken in a previous chapter, was, it will be remembered, of the same general tenor. Mr. Hayes' successor was the unfortunate General Garfield, who in his inaugural message reiterated the same ideas, as did also General Arthur.
CHAPTER XV.

POLITICAL QUESTIONS.—NO. II. THE CLAYTON-BULWER TREATY, FROM 1850 TO 1860.

England controlled the termini of the proposed canal through Nicaragua.—American convention (Hise's) with the latter.—Excitement against England.—Sir H. L. Bulwer negotiates a treaty with Mr. Clayton.—Reservations.—Misunderstanding: Americans lack proper care.—Opposition to the treaty.—Secretaries Marcy and Cass against the English interpretation.—England, annoyed at the source of trouble, is for a time ready to revoke the treaty.—She makes arrangements with Central America.—After breaking the treaty, she revives it by giving up protectorates and possessions.—The United States Government declares itself satisfied.

We have shown what has been the true American policy with regard to a joint guarantee of a canal, and in fact to any settlement by European Powers in the close proximity of the United States. But it was only when California was acquired by the American Union that it looked into this question of control of the isthmus with any special interest.

Since the eighteenth century England has made efforts to have a footing in Nicaragua, because it was thought to offer the easiest means of communication between the two oceans. We do not attempt to give a history of those efforts. For our purpose it is enough to say that in 1848, when California assumed the importance attached to a part of the United States territory, and
therefore when the problem of a canal became a matter of close concern to the Union, England had certain claims on the territory of Nicaragua—claims which were utterly untenable in themselves, but which, whether tenable or not, were most disagreeable to the Government of the United States and offensive to its people. England not only occupied the points thought to be the best termini for the supposed canal, but threatened others.

It was under these circumstances that Mr. Elijah Hise, United States Minister to Nicaragua, signed, on June 21, 1849, a "special convention having in view the grand design of opening and establishing through the territories of the latter State a passage and communication between the Caribbean Sea and the Pacific Ocean."

The treaty confers upon the United States, or "to a company of the citizens thereof," the exclusive right to construct and exploit a canal through Nicaragua, whose Government cedes absolutely all the land that may be required for it or for its dependencies. The articles referring to the neutrality of the canal are the following:

"Art. V.—The Government of the United States shall have the right to erect such forts and fortifications at the ends and along the lines of said works, and to arm and occupy the same in such manner and with as many troops as may be deemed necessary by the said Government for the protection and defence thereof, and also for the preservation of the peace and neutrality of the territories of Nicaragua, to whom pertains equal rights as inherent to her sovereignty.

"Art. VI.—The public armed vessels, letters of marque, and privateers, and the private merchant and trading vessels belonging either to the Governments or the subjects or citizens of nations, kingdoms, or countries
with which either of the contracting parties may be at war, shall not, during the continuance of such war, be suffered or allowed to come in the ports at the terminations of said canals, nor be allowed to pass on or through the same, on any account whatever; neither shall the vessels of neutral nations, whether public or private, be allowed to convey by means of said canal articles contraband of war, to or for the enemies of either of the contracting parties, or to or for other nations or states who may be at war with each other; nor shall the vessels of countries which are engaged in war with each other, owned or employed and armed by them to carry on such war, during its continuance be allowed to pass through the said canals. The public and private vessels of all nations, kingdoms, and countries which are at peace with both the contracting parties and with each other, shall be permitted to enter said ports, and to pass or be conveyed through the said canals, but they shall be subject, however, to the payment of such duties, charges, and tolls as may be established by the proprietors of the said works."

It is, moreover, provided that Nicaragua cedes two square leagues of land at each terminus of the canal for sites of two free cities, to be, "of course, under the qualified dominion" of Nicaragua, "not to be exercised in violation of their rights and immunities as herein specified."

In consideration of these favours the United States agree to protect and defend Nicaragua in her dominions and sovereignty, the former Government even employing military forces, if necessary, to preserve the peace and neutrality of Nicaragua, provided that no hostility shall first be commenced by Nicaragua without the consent of the Nicaragua and the United States Governments, given according to their constitutions.

This "Hise convention" was never submitted to the United States Senate. It found its way into the Ameri-
can press, and the public applauded it heartily; but General Taylor and his Secretary of State, Mr. Clayton, did not approve of some of its provisions, principally that for the protection of and alliance with Nicaragua, and also that Article which gives to the United States authority to create two free cities. Then, as Great Britain at that time claimed authority over the mouth of the San Juan River, which was deemed indispensable for the canal, as proposed, the treaty virtually brought Great Britain into collision with the United States. The President wanted to avoid that collision (which otherwise was popular in the United States), and at the same time he wanted to have the canal built, and as there was no money to be had in America, he wished to have the work undertaken with the goodwill of the British Government, so that British investors should embark in it.

In the meantime, on August 27, also of 1849, Nicaragua granted to an American company, named "The American Atlantic and Pacific Ship Canal Company," the privilege of building the canal, the concession being somewhat different from the Hise convention, but still containing its general features. The company was composed of Cornelius Vanderbilt, Joseph L. White, Nathaniel H. Wolfe, and others, all of whom were Americans.

On September 15, three months after the conclusion of the Hise treaty, Mr. Crampton, British Minister at Washington, giving an account of the views of the President and of Mr. Clayton, wrote to Lord Palmerston that the Government of the United States was in an embarrassing position; it had a majority in the Senate, and the general opinion in America was adverse to the claim of Great Britain's protegé, the Mosquito King, to
any part of the territory of Nicaragua. "You can form an idea," Mr. Clayton is reported as saying, "of the eagerness with which the party opposed to the Government will avail themselves of the opportunity of either forcing us into collision with Great Britain on this subject, or of making it appear that we have abandoned, through pusillanimity, great and splendid advantages fairly secured to the country by the treaty."

A few days later on Mr. Crampton reports another conversation, held at greater length, with the American Secretary. Mr. Clayton is reported as stating that what his Government desired was not to secure, as the Hise treaty did, any exclusive advantages to the United States with regard to the proposed canal, but that Great Britain should make a treaty with Nicaragua, by which no exclusive advantage should be secured to any party, and that Great Britain should "consent to make arrangements with regard to the Mosquito claim as would prevent its being an obstacle to the design in question"—that of building a canal. If that were not done, the situation in America would be embarrassing. The Hise treaty was no secret. "The universal feeling would be for its adoption; and a reason for clamouring for its instant ratification would be that this might defeat what would be represented and believed to be a plan on the part of Great Britain to secure for herself a monopoly of the most eligible passage between the two oceans." Said Mr. Crampton further on: "Mr. Clayton considered that this question could never be settled amicably unless both Great Britain and the United States withdrew all claim to the territory of Nicaragua and Costa Rica."

Sir Henry L. Bulwer arrived in Washington, as British envoy, in the latter part of 1849. One of his first
despatches to Lord Palmerston is dated January 6, 1850. He says that the great interest of the Americans in the Mosquito claim is derived from the fact that the proposed canal is expected to pass through the Lake of Nicaragua and the River San Juan. He therefore proposes to consider the expediency of a convention between the United States and Great Britain "having for its object to facilitate the construction of the desired passage between the Atlantic and the Pacific."

On February 3, Sir Henry Bulwer, writing again to the Foreign Office, enclosed the project of a convention respecting the Isthmus Canal, and in order to make clear its spirit and intention, stated his own views on the questions which it was proposed to settle. Rail or water communication, he said, by Central America, from ocean to ocean, would always have been of great interest to the United States, but since the possession of California and Oregon "it is now almost a matter of necessity." Now, it was supposed in America that "Great Britain had placed the Mosquitos in possession of Greytown expressly in order to get hold of this entrance to the canal passage for itself, and at all events to prevent its falling into the possession or being subservient to the views of any other Power. On this ground has arisen all the excitement here touching the British protectorate of Mosquito."

In view of the case Sir Henry thought that "all that seemed to be required in order to bring Great Britain and the United States to a perfect understanding is, that both should abandon every particular advantage—the one such as might be derived from the protectorate over the Mosquitos, and the other such as might be derived from any contract or treaty with Nicaragua, . . . . and dropping as a point of controversy those disputes as to the Nicaragua
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and Mosquito territory on which it is next to impossible that they should come to any agreement."

The British Minister further explains that there are stipulations which extend further than the mere engagement to use the best efforts to secure the free transit of the River San Juan, inasmuch as Great Britain agrees not to occupy or colonize any part of Central America; but in consenting to that provision Sir Henry Bulwer says he knew he was merely carrying out the views of the British Government.

Lord Palmerston, on March 8, entirely approved of the course of Sir Henry, and authorized him to sign the proposed convention; and on April 10 the since celebrated Clayton-Bulwer treaty was signed in Washington.

The preamble states that the two countries were desirous of "setting forth and fixing in a convention their views and intentions with reference to any means of communication by ship canal which may be constructed between the Atlantic and Pacific oceans by the way of the River San Juan de Nicaragua and either or both of the Lakes of Nicaragua or Managua."

The two Governments agree in Art. I. that neither the one nor the other will ever obtain for itself any exclusive control over the said ship canal, or erect and maintain fortifications in its vicinity, "or occupy, or fortify, or colonize, or assume, or exercise any dominion over Nicaragua, Costa Rica, the Mosquito coast, or any part of Central America; nor will either make use of any protection which either affords or may afford . . . . for the purpose of erecting or maintaining any such fortifications, or of occupying, fortifying, or colonizing Nicaragua, Costa Rica, the Mosquito coast, or any part of Central America, . . . . nor will . . . . take advantage of any intimacy or
use any alliance, connection, or influence that either may possess with any State or Government through whose territory the said canal may pass, for the purpose of acquiring or holding, directly or indirectly, for the citizens or subjects of the one, any rights or advantages, in regard to commerce or navigation through the said canal, which shall not be offered on the same terms to the citizens or subjects of the other."

Several provisions follow about the facilitating of the construction of the *said canal*. Then, by Art. V. both parties engage to protect the said canal from interruption, seizure, or unjust confiscation, and will guarantee its neutrality; this protection and guarantee being granted conditionally upon the persons controlling the management not making unfair discriminations in favour of the commerce of one of the contracting parties.

By Art. VI. the two Governments engage to invite the other friendly Powers to enter into similar treaties to this. And they likewise agree to enter into stipulations with such of the Central American States as they may deem advisable for the purpose of maintaining the neutrality of the canal and protecting it on equal terms for all nations.

By Art. VII. the contracting parties promise support and encouragement to such persons or company as should already have contracted for the construction of such canal. (The American Atlantic and Pacific Company had that contract.)

Art. VIII. cannot be well understood in view of the fact, that the treaty of 1846-8, between Colombia (then New Grenada) and the United States, to which we referred in our previous chapter, was then in force, and is in force to this day. It says:— "The Governments of the United States and Great Britain having
THE CLAYTON-BULWER TREATY. not only desired, in entering into this convention, to accomplish a particular object, but also to establish a general principle, they hereby agree to extend their protection, by treaty stipulations, to any other practicable communications, whether by canal or railway, across the isthmus which connects North and South America, and especially to the interoceanic communications, should the same prove to be practicable, whether by canal or railway, which are now proposed to be established by the way of Tehuentepec or Panama. In granting, however, their joint protection to any such canals or railways as are by this article specified, it is always understood by the United States and Great Britain that the parties constructing or owning the same shall impose no other charges or conditions of traffic thereupon than the aforesaid Governments shall approve of as just and equitable; and that the same canals or railways, being open to the citizens and subjects of the United States and Great Britain on equal terms, shall also be open on like terms to the citizens and subjects of every other State which is willing to grant thereto such protection as the United States and Great Britain engage to afford."

Now, on June 29, 1850, prior to the exchange of the ratifications of the treaty, Sir Henry Bulwer made a declaration to the effect that "Her Majesty does not understand the engagements of that convention to apply to Her Majesty’s settlements at Honduras or to its dependencies." And Mr. Clayton on July 5 said that he "understood British Honduras was not embraced in the treaty."

These declarations were never submitted to the American Senate, and therefore are not to be considered as part of the treaty, having never been ratified.

Such were the provisions of the Clayton-Bulwer con-
vention of April 19, 1850, which we consider one of the most brilliant triumphs of Lord Palmerston. England, indeed, yielded absolutely nothing. What the Americans wanted was that England should withdraw the Mosquito claim to any portion of Nicaragua—a claim, indeed, which was absurd, as Mr. Lawrence, United States Minister in London, demonstrated most fully in a dispatch to his Government, bearing the same date as that in which his unpopular Government was signing in Washington the convention with Sir Henry Bulwer. Mr. Lawrence's dispatch is an exhaustive dissertation, in which he shows historically that the Mosquitos were not an independent nation, and that therefore all acts done by them are null and void. The British protection over the so-called "King" of those Indians was the cause of what Sir Henry described as "excitement," and Mr. Clayton wanted Great Britain to withdraw all claim to the territory of Nicaragua. Sir Henry Bulwer had the happy idea of meeting the views of the indolent (to say the least) American Secretary by displacing the question. He said: "You wish to have the canal built, and have got a company with a concession, and you wish England to withdraw from Nicaragua. England will not withdraw, but promises not to use her influence with the Mosquito King to embarrass you, promises to protect the canal, and furthermore promises not to occupy, fortify, or colonize Nicaragua, or even the Mosquito coast."

Mr. Clayton yielded easily. The wording of Art. I. is rather ambiguous. England would not exercise any dominion in the Mosquito coast, but at the same time England promises that she will not "make use of any protection which either affords or may afford" to bring about that dominion, fortification, or colonization. There
is not the least doubt that the treaty recognizes that one or both of the contracting parties at the time afforded, and might still afford, protection "to any State or people," for the purposes aforesaid. It was the clear intention of Sir Henry Bulwer that the Mosquito protectorate should continue, of course under certain reservations as specified. In his note to Lord Palmerston, dated February 3, 1850, explaining the intent of the convention, as already quoted, he stated that the understanding was, that Great Britain should abandon every particular advantage, "such as might be derived from the protectorate over the Mosquitos," and dropping the disputes about such protectorate on which it was next to impossible that Great Britain and the United States should ever agree; and he added that the purpose of the proposed convention was "to exclude all question of the disputes between Nicaragua and the Mosquitos, but to settle, in fact, all that it was essential to settle with regard to those disputes, as far as the ship communications . . . . were concerned."

On April 24, a week after the conclusion of the convention, Sir Henry Bulwer, after giving an account of some slight differences, says that he embodied in the treaty the substance of the declaration given by Lord Palmerston to Mr. Lawrence on November 13, 1849, viz.: "that the British Government has no intention to make use of the protection which Great Britain affords to the people of Mosquito for the purpose of doing, under the cover of that protection, any of the things the intention to do which is disclaimed." (See Lord Palmerston to Sir Henry Bulwer, March 8, 1850.) Sir Henry says therefore, that "as the case now stands it is clearly understood that Her Majesty's Government holds its own opinions, already expressed, as to Mosquito;" and he adds: "I need not say that should your lordship wish to make any
further statement as to the views of Her Majesty’s Government with respect to the protectorate of Mosquito, that statement can still be made: nothing in the present convention is affirmed thereupon, but nothing is abandoned."

Nothing indeed was abandoned. The purpose of the able diplomatist was to cause the Americans to give up the substantial convention arranged by Hise, and to quiet the "excitement" about Mosquito, not by abandoning the protectorate, but by the promise that it would not be used so as to put obstacles in the way of the construction of a canal.

It seems almost incredible that the Senate should have been satisfied with the terms of the treaty. How could Great Britain continue a protectorate and at the same time engage from ever fortifying the Mosquito coast? A protectorate was exactly that thing to which the people of the United States objected, and yet nothing was given up by Great Britain in that respect. It may be said that what Sir Henry Bulwer wrote to Lord Palmerston is not of consequence; but the first article of the treaty is very clear in not deciding anything about the protectorate, and, on the contrary, in affirming that such protectorate might continue. At any rate, the Clayton-Bulwer convention appeased for some time the agitation in the United States. Colonel Childs was commissioned to make surveys in Nicaragua, and his plans having been approved of by an American commission of army engineers, were submitted to English engineers, although that had no effect on the public, for the "American Atlantic and Pacific Company" was unable to raise the money.

But the good understanding between Great Britain and the United States was not to last long, as might be
expected. Lord Palmerston had been gaining a too easy victory through his cleverness and that of his special envoy. The ratification of the treaty was certainly due to a misunderstanding of the intents of the former Power—a misunderstanding that does not speak well for the watchfulness of the Americans of that period.

Two years after the ratification, Mr. Webster, Secretary of State, agreed with the British Minister, Mr. Cramp- ton, upon a proposal to Costa Rica and Nicaragua for the adjustment of their disputes, as well as for the settlement of the controversy between Great Britain and Nicaragua in regard to the territory claimed by the Mosquitos, who were to give up Greytown to Nicaragua. That instrument does not refer to the protection afforded by Great Britain, and only to claims between the Mosquitos and Nicaragua; but the joint negotiations with Nicaragua failed, and nobody who appreciates patriotism can blame Nicaragua for it.

A great discussion was raised soon afterwards about the "declarations" of Sir Henry Bulwer and of Mr. Clayton, and the whole subject was reopened. In December 1853, the American Secretary of State, Mr. Marcy, instructed the Minister to Central America, Mr. Bosland, to take the treaty as "meaning what the American negotiator intended when he entered into it, and what the Senate must have understood it to mean when it was ratified"—viz., that by it Great Britain came under engagement to the United States to recede from her asserted protectorate of the Mosquito Indians, or to cease to exercise dominion or control in any part of Central America. If she had any colonial possessions therein at the date of the treaty, she was bound to abandon them, and equally bound to abstain from colonial acquisitions in that region.
Referring to the object of the "declaration" of Sir Henry Bulwer—i.e., the settlement of Belize or British Honduras—Lord Clarendon, on May 2, 1854, made a statement to Mr. Buchanan, the American Minister in London. He says that that settlement is not properly in "Central America," or in the territory of the former republic of that name, and now forming five distinct governments. This declaration was made in order to avoid misconception. The Belize here alluded to is the settlement of Belize as established in 1850, and where in 1847 the United States had sent a consul, who received the British exequatur, the United States thus recognizing the sovereignty of the latter; not the Belize of 1786, as Mr. Buchanan seemed to imply.

Between 1854 and 1856 Nicaragua annulled the charter of the "Atlantic and Pacific Ship Canal Company," and Great Britain concluded a treaty with Honduras for the protection and neutrality of any means of communication through its territory from ocean to ocean.

In 1857, on May 6, Lord Napier, British Minister in Washington, wrote to Lord Clarendon, that "the President denounced the Clayton-Bulwer treaty as one which had been fraught with misunderstanding and mischief from the beginning. It was concluded under the most opposite constructions by the contracting parties. If the Senate had imagined that it could obtain the interpretation placed upon it by Great Britain, it would not have passed. If he had been in the Senate at the time, that treaty never would have been sanctioned."

Of course, there is abundant historical proof that there was a misapprehension on the side of the Americans as to the construction of the stipulations. But the fault was their own. They did not pay proper attention to the treaty, and they meant what was not specified in it,
directly or indirectly. They had only to thank themselves for the misunderstanding.

General Cass, Secretary of State, wrote to Lord Napier on May 29 of the same year, and, referring to these different constructions, goes so far as to say that, had the British interpretation been made clear, no President and no Senate would have ratified it. But General Cass does not show it. He and his predecessors and successors speak of what must have been the feeling of their country, but not of what the treaty itself clearly says.

General Cass is stronger in his contention about the Bay Islands, Honduras, which were formally annexed to Great Britain on July 17, 1852 (two years after the conclusion of the Clayton-Bulwer treaty), by the following proclamation:

"Office of the Colonial Secretary,

"Belize, July 17, 1852.

"This is to give notice, that Her Most Gracious Majesty the Queen has been pleased to constitute and make the islands of Roatan, Bonacca, Utilla, Barbarat, Helène and Morat to be known and designated as a colony of the Bay Islands.

"Augustus Frederick Gore,

"Colonial Secretary.

"God save the Queen."

That was, said General Cass, and always has been considered, "a violation of the treaty" of 1850, "even under the British construction of it."

On June 22, also of 1857, Lord Napier writes again to Lord Clarendon, that "an attempt will be made in the next session of Congress to set aside the Clayton-Bulwer treaty. . . . . There can be no doubt of the views of the President and Cabinet on this matter."
Four months later, General Cass, acknowledging a communication from Lord Napier concerning the relations between Nicaragua and Costa Rica, hoping that those two countries may enjoy prolonged peace, and referring to the Clayton-Bulwer treaty as contemplating harmony, reminds Lord Napier that that treaty did not heal the differences between the two countries. Those differences, he says, “still remain unsettled, while the treaty itself has become the subject of new and embarrassing complications.”

Indeed, Lord Napier, writing soon afterwards to Lord Clarendon (October 22, 1857), stated that he had heard the President say that “that treaty had never been acceptable to the people of the United States, and would not have obtained a vote in the Senate had the least suspicion existed of the sense in which it was to be construed.”

In his message to Congress in December 1857, the President (Mr. Buchanan, ex-Minister to England) devoted much space to this subject, stating what the United States believed to be the position of Great Britain when the treaty of 1850 was ratified. That Power, he says, contends that the treaty does no more than simply prohibit them from extending their Central American possessions beyond what they were at that time.

“The universal conviction,” says the President, “when our Government consented to violate its traditional and time-honoured policy . . . . was that the consideration for this sacrifice was that Great Britain, in this respect at least, should be placed in the same position as ourselves.”

Buchanan adds that the British colonization of Honduras was “in direct opposition and meaning of the Clayton and Bulwer treaty.” Even as late as 1856, when on August 27 Great Britain proposed a convention
to Honduras, by which she "cedes" to the latter the Bay Islands—"a free territory under the sovereignty of the Republic of Honduras"—it deprived Honduras of rights without which sovereignty scarcely exists.

The question remained open, and on March 22, 1858, Lord Napier, communicating to Lord Malmesbury what was being done with regard to the different ways of settling pending controversies in Central America, said that "these modes both involve the maintenance of the Clayton-Bulwer treaty in its essential principle—viz., the neutrality of the Central American region"—and the exclusion of both parties from territorial acquisitions there. Lord Napier adds that the British Government, "prompted by an impression, derived from many sources, that the obligations of the Clayton-Bulwer treaty were repugnant to the people of the United States, . . . . authorized me to inform General Cass that Her Majesty's Government would not decline the consideration of a proposal for the abrogation of the treaty by mutual concert." Furthermore, says the Minister, "I had no information of the intentions of Her Majesty's Government beyond the bare fact that they would entertain a proposal to cancel the engagement of 1850. . . . . In reply to my observations, the Secretary of State remarked that he would reserve the subject. . . . . He added, as a personal impression, that he was in favour of a naked unqualified repeal of the Clayton-Bulwer treaty without conditions."

Lord Malmesbury, writing to Lord Napier on April 8, 1858, admits that "the Clayton-Bulwer treaty has been a source of unceasing embarrassment to this country." On July 25 Mr. Cass sent a long memorandum to Mr. Lamar, reviewing the whole dispute in a very lucid manner. In December, Lord Malmesbury, referring to
the note, speaks of "the accuracy with which General Cass has recapitulated the circumstances under which the controversy has been sustained."

But the abrogation of the treaty was not really palatable to England; she therefore resolved upon adhering to the American interpretation of it by means of arrangements made with the several Central American Governments to whose territory England had, directly or indirectly, any claim.

In April and November 1859, and January 1860, Great Britain concluded treaties with Guatemala, Honduras, and Nicaragua respectively, for regulating the questions pending with them; among other things providing for the cessation of the protectorate over the Mosquitos three months after the ratification of the treaty.

These conventions gave satisfaction to the United States Government; and on December 3, President Buchanan, announcing their conclusion, said that "the discordant constructions of the Clayton and Bulwer treaty . . . have resulted in a final settlement entirely satisfactory to this Government."

That seemed to terminate the first period of discussion of the celebrated convention which, during the first ten years, had given rise to so much irritation.
CHAPTER XVI.

POLITICAL QUESTIONS.—NO. III. THE CLAYTON-BULWER TREATY FROM 1860 TO 1882.

President Buchanan's declaration.—Secretaries Seward and Fish consider the treaty as binding.—What the French concession by Colombia proposes to do.—President Hayes' objections: his message on the subject.—Mr. Blaine's protests, and Lord Granville's answer.—A European guarantee inadmissible by the United States.—Mr. Blaine's views as to the treaty.—Lord Granville's criticism.

Whatever may have been the infringements on the Clayton-Bulwer treaty on the part of Great Britain up to 1860, there can be no doubt that the United States Government considered the discordant constructions of that convention, up to that time, to "have resulted in a final settlement entirely satisfactory to this Government," as President Buchanan solemnly says in his annual message to Congress in December 1860. Buchanan had been the Minister to England who protested so strongly against the English construction of the treaty, and it was he who now declared that the Government at whose head he was placed was entirely satisfied. And he explains why: England had given up the Bay Islands and the Mosquito protectorate, which she had not wanted to relinquish in 1856-7, when the American Senate had insisted on it, in deciding on the Dallas convention of Oct. 17, 1856.

The United States had accepted a treaty without
proper attention to its wording, and although it cannot be denied that the general feeling in the country would have prevented its ratification should the British and literal construction of it have been made manifest, the fact is, that it was ratified, and that Great Britain adhered to its letter so far as the Mosquito protectorate was concerned, and strained (to say the least) the declaration of Lord Bulwer as to Honduras so as not to appear to have broken the treaty, as in the opinion of many persons she undoubtedly did.

But England withdrew from whatever untenable positions she had taken, and the United States declared in a most formal manner that they were entirely satisfied. The Clayton-Bulwer treaty therefore was, so to say, re-established in its entirety; the two Governments agreeing to give it the American construction so far as regarded the colonizing of, or protectorates on, the isthmus.

The great civil war for the disruption of the Union broke out soon after Mr. Buchanan went out of office. After the termination of the conflict, Mr. Seward, the Secretary of State, had occasion, in 1866, to write to the Minister in London about the proposed acquisition by the United States of the island of Tigre, in Fonseca Bay, Honduras—an island which in 1849 Honduras had ceded to the United States as a coaling station, although the cession, negotiated by Mr. Squier, was not confirmed by the United States. Fonseca Bay is that into which the Estero Real empties itself, and it is well known that that stream was supposed by many to offer the best route for a ship-canal. Mr. Seward wrote at length about the expediency of the United States acquiring what he calls a "coaling station under our own flag, for naval observation and police," and he instructed Mr. C. F. Adams to "sound Lord Clarendon as to the disposition of his
Government to favour us in acquiring coaling stations in Central America, notwithstanding the stipulation contained in the Clayton-Bulwer treaty."

Nothing could show in a clearer way that the United States Administration considered the Clayton-Bulwer treaty was still in force. The position of Mr. Seward was really this: Prior to 1850, when the Clayton-Bulwer treaty was negotiated, England had possessions in Central America; these she meant to keep, but as the Americans objected, and stated that they had only entered into the treaty in consideration of England's withdrawal, England withdrew. Now the United States propose to modify the treaty by asking, as a favour from England, that, as the conditions of the United States had changed, they may be allowed to acquire a naval station in Central America.

Mr. Adams approached Lord Clarendon on the subject, but only in a very general and vague way (as he had been instructed to do); and giving an account of the conversation held with his lordship, he wrote to Mr. Seward on June 2, 1866, that he had said to Lord Clarendon that there was "the possibility that the terms of the Clayton-Bulwer treaty might interpose difficulties in the way of securing the most convenient point that we might desire."

It therefore remains an undoubted fact, that in 1860 and 1866 the United States recognized the Clayton-Bulwer treaty as binding upon themselves.

Throughout the administration of General Grant, and up to 1880, these views had not changed. Indeed, the Secretary of State, Mr. Hamilton Fish, who in 1870 had written a very elaborate report accompanying the President's message to the Senate of July 14—a report in which the Secretary makes a lucid explanation of the
"Monroe doctrine"—now wrote an important dispatch to Minister Schenck in London, dated April 26, 1873. In this dispatch he complains that the British Government did not altogether abide by the Clayton-Bulwer treaty in its convention with Nicaragua of January 28, 1860; and Mr. Fish, moreover, says that he had information to the effect that when the British Commissioners went to mark the boundaries of the British settlement at Belize, in conformity with the treaty of April 30, 1859, entered into with Guatemala, they found, upon reaching the Sarstoon River, that British subjects were trespassing upon that river, whereupon they refused to proceed, and the treaty, if not virtually cancelled, has at least been suspended. Mr. Fish adds that the Minister from Guatemala at Washington tells him that his Government considers the treaty at an end. Should these facts prove to have been correct, concludes Mr. Fish, "you" (the American Minister in London) "will then formally remonstrate against any trespass by British subjects, with the connivance of their Government, upon the territory of Guatemala as an infringement of the Bulwer-Clayton treaty which will be very unacceptable to this country."

Now, whether the British Government broke the treaty or not in either or in both of the above cases—in Mosquitia and at the Sarstoon River—the fact is, that the United States, in April 1883, considered the Clayton-Bulwer treaty as in force. That is enough for our present purpose.

But did the British break the treaty first in Mosquitia? Mr. Fish's complaint is very weak indeed. He says the treaty with Nicaragua assigned boundaries probably beyond the limits which the Mosquitos had ever seen. Of course there is nothing in such complaint when it is considered that the United States Government, after having
full knowledge of the treaty, declared itself entirely satisfied with it. It is hardly dignified to that Government to say, thirteen years afterwards, that what was then arranged and approved of was probably not what had been meant.

As to the second grievance, namely, the settlement of British subjects beyond the admitted frontier between Belize and Guatemala, it would have been an infringement of the Clayton-Bulwer treaty had such settlement been made with the connivance of the British Government. That, however, has not been proved. At any rate, here we have an American Secretary of State, as conservative, learned, and patriotic as any of his predecessors, making complaints (vague and groundless as they were) against “an infringement of the Clayton-Bulwer treaty,” and this is very important as coming from one who, a few years before, wrote a most interesting and strong defence of the “Monroe doctrine.”

In June, 1881, President Garfield’s Secretary of State, Mr. J. G. Blaine, hearing that the great European Powers might possibly be considering the subject of jointly guaranteeing the neutrality of the interoceanic canal now projected across the Isthmus of Panama, sent a circular note to the United States Ministers in Europe, stating what he said to be the American view on that point. The United States Government, he laid down, recognizes the necessity of a guarantee, but it has already guaranteed “positively and efficaciously” the neutrality of the isthmus canal and the sovereignty of Colombia, and that guarantee “does not require re-enforcement, or accession or assent from any other Power. . . . . Supplementing the guarantee . . . . would necessarily be regarded by this Government as an uncalled-for intrusion into a field where the local and general interests of the
United States of America must be considered before those of any other Power save those of the United States of Colombia."

Mr. Blaine further explains that the Government does not want to interfere with the commercial management of the enterprise; but as to its political control, it must speak with both directness and emphasis. "The passage of armed vessels of a hostile nation through the canal of Panama would be no more admissible" in case of war, to which the United States or Colombia should be a party, "than would be the passage of the armed forces of a hostile nation over the railway lines joining" the oceans through Colombia. "And the United States of America will insist upon their right to take all needful precautions against the possibility of the isthmus transit being in any event used offensively against their interest upon the land and upon the sea."

The Secretary then shows how immense are those interests, how vast is the Pacific Empire of the United States, and goes on to say that if the proposed canal were a channel for trade near countries of Europe, the influence of European Powers therein would be commensurate with their interest, and the United States would find no fault with it. "The case, however, is here reversed, and an agreement between the European States to jointly guarantee the neutrality and, in effect, control the political character of a highway of commerce, remote from them and near to us, forming substantially a part of our coast-line, and promising to become the chief means of transportation between our Atlantic and Pacific States, would be viewed by this Government with the gravest concern."

"Any attempt," continues Mr. Blaine, "to supersede that guarantee by an agreement between European
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Powers which maintain vast armies and patrol the seas with immense fleets, and whose interest in the canal and its operations can never be so vital and supreme as ours, would partake of the nature of an alliance against the United States. . . . It is the long-settled conviction of this Government, that any extension to our shores of the political system by which the great Powers have controlled and determined events in Europe, would be attended with danger to the peace and welfare of this nation."

Of course Mr. Blaine confined himself to a declaration of the views of his Government, without regard to existing stipulations with Great Britain.

President Garfield was shot on July 2, and Lord Granville delayed answering Mr. Blaine's note until November 10, when he very curtly said that, while he was glad that Mr. Blaine had no intention to initiate discussion on the "joint guarantee for the isthmus," he wished to point out that "the position of Great Britain and the United States with reference to the canal, irrespective of the magnitude of the commercial relations of the former Power with countries to and from which, if completed, it will form the highway, is determined by the engagements entered into by them respectively in the convention . . . . commonly known as the Clayton-Bulwer treaty; and Her Majesty's Government rely with confidence upon the observance of all the engagements of that treaty."

England really said to the United States: "All you say of your paramount interests is very fine; but thirty-one years ago I got some promise that neither you nor I would take any exclusive advantage in Central America. You have grown stupendously, but I do not care for that; you must abide by what you contracted with me when you were comparatively poor and weak."
Before Lord Granville's note reached Washington, Mr. Blaine, tired of waiting, sent a very long dispatch to Mr. Lowell, this time about the Clayton-Bulwer treaty. The theory of the Secretary is this: the remarkable development of the United States has created new duties for that Government, the complete discharge of which requires some essential modifications in the Clayton-Bulwer treaty. "The operation of the treaty practically concedes to Great Britain the control of whatever canal may be constructed" on account of her vast navy. While "the treaty binds the United States not to use its military force in any precautionary measure," it leaves the naval power of Great Britain "perfectly free and unrestrained." To put both Governments on the same footing it would be necessary to prohibit war vessels of Great Britain from passing through the canal. The United States want what Great Britain has been obtaining everywhere. Great Britain holds and fortifies all strategic points that control the route to India: Gibraltar, Malta, Cyprus, a controlling interest in Suez Canal, fortifications at Aden and at the Perin Island,—all serve that purpose. It is therefore not more "unreasonable for the United States to demand a share in these fortifications, or to demand their absolute neutralization, than for England to demand the same in perpetuity from the United States with respect to the transit across the American continent." England guards the route to her colonies; the United States want to guard the route to some of their own territory comprising nearly 800,000 square miles, an area larger than Germany and the four Latin countries of Europe put together, and inhabited, not by people of alien races, but by "bone of our bone, and flesh of our flesh."
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Should a hostile movement be made against the Pacific States of the Union the Government would feel as if it had been neglectful towards its own citizens if it permitted itself to be bound by a treaty which gave the same right through the canal to a war-ship bent on an errand of destruction that is reserved to its navy sailing for the defence of the coast and protection of the citizens.

And Mr. Blaine goes on:—

"A mere agreement on paper between the great Powers of Europe might prove ineffectual to preserve the canal in time of hostilities. The first sound of a cannon in a general European war would, in all probability, annul the treaty of neutrality, and the strategic canal would be held by the first Power that would seize it," to the incalculable loss of the United States. For these reasons the isthmus should be placed "under the control of that Government least likely to be engaged in war, and able, in any and every event, to enforce the guardianship which she shall assume. For self-protection to their own interests, therefore, the United States, in the first instance, assert their right to control the isthmus transit; and, secondly, they offer, by such control, that absolute neutralization of the canal as respects European Powers which can in no other way be certainly attained and lastingly assured."

Mr. Blaine then endeavours to show that while both countries, the United States and Great Britain, are tied down in common helplessness, a third or fourth Power, or a combination of them, may step in and assume control of the canal. The Clayton-Bulwer treaty, he says, originated in the American desire for British capital in the construction of the Nicaragua Canal; now there is no more any such need. In conclusion, he hopes that the modifications of the treaty decreed by the United States
will be conceded in a friendly spirit, and he enumerates what are the changes so desired. They are (1) regarding the prohibition of the United States fortifying the canal, and holding political control of it in conjunction with the country in which it is located; (2) regarding the prohibition to the United States to acquire territory in Central America: "The acquisition of military and naval stations necessary for the protection of the canal, and voluntarily ceded to the United States by the Central American States not to be regarded as a violation of the provisions" of the treaty; (3) the eighth article of the treaty to be null and void; (4) the clause defining the distance from either end of the canal in time of war captures to be made as liberal as possible.

Not contented with this manifesto, Mr. Blaine sent another dispatch to Mr. Lowell, on November 29, 1881, this time having in view Lord Granville's reply, already referred to. He quoted profusely, though very incompletely, from the diplomatic correspondence between 1850 and 1859, in order to show what he called "the historical objections to the Clayton-Bulwer treaty, and the very decided differences of opinion between the two Governments to which its interpretation has given rise."

As Mr. Blaine stopped his extracts from the correspondence in December, 1858, his whole despatch becomes of no more importance than any story that falls through before the end is reached. We have already stated that in 1860 President Buchanan pronounced himself as entirely satisfied with the negotiations of the British Government with Nicaragua, Guatemala, and Honduras for the purpose, "of carrying the Clayton-Bulwer treaty into execution according to the general tenor of the interpretation put upon it by the United States," if we put it in the words of Lord Napier at that time.
If Mr. Blaine does not follow up his historical narrative to the end, it is clear that he has weakened his own case. The only important part of his dispatch is that in which he considers whether Article VIII. of the treaty applies at all to the Panama Canal, which is certainly a delicate point of great interest. But even here Mr. Blaine does not make as good a case as he undoubtedly could.

Lord Granville, in answer to Mr. Blaine, sent a dispatch to Mr. West, British Minister at Washington, dated January 7, 1882. He recognizes the vast development of the United States, but he says that the proposed canal does not concern only that country, but the whole civilized world. Her Majesty's Government are anxious that, while all nations should enjoy the canal, no single country should acquire a predominating control over it. Lord Granville further says that it would not be agreeable or convenient to any of the Central American republics through which the canal might pass to find itself called upon to admit a foreign Power to construct fortifications in its territory, for if any of them allowed this, independence would virtually be lost. The British Government holds that the principles of the treaty of 1850 "are intrinsically sound, and continue to be applicable to the present state of affairs." The conventions of Great Britain with Nicaragua and Honduras in 1856 and 1860, those of the United States with the same countries in 1864 and 1867, and of Nicaragua with France in 1859, show, Lord Granville says, that some progress has been made in that direction.

In another dispatch, dated January 14, Lord Granville shows that Mr. Blaine's extracts were imperfect, and that he did not quote Buchanan's solemn declaration already referred to.
Mr. Blaine's position was perhaps perfectly correct so far as he explained the true American feeling in the matter. The tone of his dispatches, however, was not good, owing to his personal peculiarities and his lack of training. He spoiled his case, too, by defending it from its most vulnerable point. That he was mainly correct in expounding the American doctrine as to the Clayton-Bulwer treaty is seen from the fact that his successor, the late Mr. Frederick T. Frelinghuysen, who reversed many of the most important steps taken by Mr. Blaine during his short tenure of the American Foreign Office, not only corroborated Mr. Blaine's views, but developed them with remarkable vigour as well as great skill. His attitude we shall describe in the next chapter.
CHAPTER XVII.

POLITICAL QUESTIONS.—NO. IV. BRITISH AND AMERICAN VIEWS.—THE BEST SOLUTION.

Mr. Frelinghuysen follows Mr. Blaine's arguments.—Lord Granville's exposition of the British views.—Weakness of the American position in the correspondence and strength of its case on general grounds.—A second canal under American exclusive control the best solution for a difficult position.

On May 8, 1882, Mr. Frelinghuysen replied to Lord Granville's despatches to Mr. Blaine, dated January 7 and 14, already sketched in Chapter XVI. He repeats the previous American declarations that for the United States it is "unnecessary and unwise, through an invitation to the nations of the earth, to guarantee the neutrality of the transit of the isthmus, or to give their navies a pretext for assembling in waters contiguous to our shores, or to possibly involve this Republic in conflicts from which its natural position entitles it to be relieved."

Treaties are harmless or useless in time of peace; but when wars come it is impossible to enforce them. Such agreements, moreover, would lead to political intervention in American affairs, "which," says Mr. Frelinghuysen, "the traditional policy of the United States makes it impossible that the President should either consent to or look upon with indifference. . . . . The formation of a protectorate by European nations over the isthmus transit would be in conflict with a doctrine which has been for many years asserted by the United States . . . . which
opposes any intervention by European nations in the political affairs of American republics."

Entering upon the discussion of the questions concerning the Clayton-Bulwer treaty, the Secretary writes at a very great length to show that the convention was made for a particular object which has since ceased to exist; that Great Britain to this day, and, contrary to its provisions, maintains a colony in Honduras, so that the treaty is voidable at the pleasure of the United States, as it has been broken by Great Britain; and, finally, that Art. VIII. refers merely to the lines of railway or canal which were proposed at the time of the treaty. We should like to be able to dispose of space enough to transcribe at least ample extracts from this exceedingly able and cogent State Paper, which reminds one of the better days of American diplomacy. We must, however, content ourselves with only a few sentences which we quote in order to show the line of argument of Mr. Frelinghuysen.

He contends that the Clayton-Bulwer treaty had for its primary object not only to aid the immediate construction of the proposed Nicaragua Canal, but also to dispossess Great Britain of settlements in Central America, whether under cover of Indian sovereignty or otherwise.

And yet, he says, "Great Britain exercises dominion over Belize or British Honduras, the area of which is equal to that of Massachusetts, Connecticut, and Rhode Island." Such dominion seems to be inconsistent with the treaty of 1850. At that time the English privileges on Belize, conferred by treaties with Spain, "were confined to a right to cut wood and establish saw-mills," in a defined territory. Even if the so-called "declarations" of Sir Henry L. Bulwer, acknowledged by Mr. Clayton, regarding British "settlements" in Honduras were valid, the British Government has unlawfully ex-
tended a "settlement" to cut wood into a regular colony. But, says Mr. Frelinghuysen, the Bulwer declaration *after the conclusion of the treaty* was *not made nor accepted by the President and the Senate.* That declaration is not considered as part of the treaty. According to Mr. Frelinghuysen, the solemn declaration of President Buchanan in 1860 referred to the dispossess-sion of Great Britain from one of the ends of the canal route through Nicaragua, which was accomplished by means of the treaties of 1859 and 1860. Those treaties had nothing to do with the colonization of British Honduras.

The Clayton-Bulwer treaty was entered into in view particularly of the construction of the Nicaragua Canal, for which American citizens held a concession, upon which it was meant to act when they were confronted with the British occupation of one of its ends. Mr. Frelinghuysen calls attention to the significant fact that one of the most important alterations made in the draft that Sir Henry Bulwer sent to Lord Palmerston was the addition to Art. VII. referring particularly to "any persons or company" which should at the time have made a contract for the construction of the canal with the State through which it might pass. The provisions of the first article of the treaty, regarding fortifications, control, &c., and of the second and the third up to the sixth article, refer *only* to that particular canal.

And here Mr. Frelinghuysen calls attention to Art. VII. of the treaty wherein it is said to be understood that "if at the expiration of the aforesaid period" (a year after ratification) "such persons or company be not able to commence and carry out the proposed enterprise, *then* the Governments of the United States and Great Britain *shall be free to afford their protection to any other persons* that shall be prepared to commence and proceed
with the construction of the canal in question." Mr. Frelinghuysen interprets this provision in this way: "If under . . . the seventh article the claims of the holders of this particular concession should be set aside, then each Government reserved to itself the right to determine whether its interests required it to afford protection to the holders of any other concession."

The Nicaragua concession was acted upon: surveys were made by Childs, and were then submitted to a commission of Royal Engineers, and only afterwards through the lack of money the concession expired. The treaty, therefore, has, it may be argued, become obsolete.

Before the Clayton-Bulwer treaty was negotiated the United States had already the treaty of 1846–48 with Colombia. That treaty, says the late Secretary, "created a relation that cannot be superseded . . . . A protectorate of this kind is . . . necessarily exclusive in its character." Great Britain cannot join that protectorate, created years before the Clayton-Bulwer treaty, without the consent both of Colombia and of the United States. And should Great Britain claim the right to join in the protection of the existing railway company, or in any future Panama Canal, "the United States would submit that experience has shown that no such joint protectorate is requisite," and "that the Clayton-Bulwer treaty is subject to the provisions of the treaty of 1846 with New Granada, while it exists, which treaty obliges the United States to afford, and secures to them the sole protectorate of any transit by the Panama route."

In short, "the United States esteem themselves competent to refuse to afford their protection jointly with Great Britain," and, of course, as to inviting other nations to guarantee the canal. Mr. Frelinghuysen ends by declaring solemnly that "the United States would look
with disfavour upon an attempt at a concert of political action by the other Powers in that direction."

Lord Granville answered these arguments in a despatch, dated December 30, 1882. He denies that the treaty refers only to the particular route or routes then proposed, and points out once more the "general principle" of Art. VIII., wherein protection is promised to "any other practicable communications," and then "specially" to those "which are now proposed to be established by the way of Tehuantepec, or Panama."

As to the treaty of 1846–48 between the United States and Colombia, there is nothing in it that confers on the United States any exclusive right of protection, or which is inconsistent with the joint protection of Great Britain and the United States. The treaty means no more than the treaties of Great Britain, France, and the United States with Honduras and Nicaragua.

Lord Granville then refutes the arguments of Mr. Frelinghuysen on the violation of the treaty of 1850 on account of the British colony of Belize. British Honduras, he says, was acquired by conquest before 1850, and the United States have formally recognized the colony in 1869 as a dependency of Great Britain.

That is so; but we hardly think that Lord Granville makes good his case. The recognition of that fact does not mean that the Clayton-Bulwer treaty has not been violated by Great Britain, which seems to be the undisputed fact. It is not unintentionally that Lord Granville does not dwell long on the subject.

In his dispatch to Mr. West of August 17, 1883, Lord Granville returns to that point, and this time he cannot see with what justice the United States claim that the arrangement as to Honduras is a violation of the treaty
when President Buchanan expressed himself as entirely satisfied.

From the summary of the correspondence on the political control of the canal in the three last chapters, it appears that the so-called "Monroe doctrine" is not a mere vague sentiment, but a conviction deeply imbedded in Americans of all parties, and we have seen that, although they have been growing very fast as a nation, and are most prosperous, their prosperity, which has corrupted some of their political ideas, has not yet touched the "principle" that Europe is not to meddle in the political affairs of American republics. It makes no difference whether Great Britain or all the rest of the world do not admit the doctrine of Monroe; it is still cherished by the United States, and as long as they are powerful it cannot help being respected. Great Britain would not dare to take possession of Cuba—although it is still a colony of another Power—at the expense of a war with the United States. And if France should attempt to take Panama she would soon be expelled, as were the troops of Napoleon III. when he tried to found an empire in Mexico.

The "doctrine," however, has not been followed very closely in several instances, all of which are regretted by the true friends of the United States. The Clayton-Bulwer treaty is the most striking exception. Clayton wanted to dislodge Great Britain from the terminus of what was then supposed to be the only available line for a ship canal across Central America. And the consideration that he gave for that dispossess was to bind his Government by admitting Great Britain to a control in the canal and in promising to ask the different Powers of Europe and America to join in its protectorate. Yet
England was not dislodged from Greytown until 1860; neither Clayton nor the Senate took proper precautions with the wording of the treaty, and the Americans were astonished to find out that Great Britain had never meant to be dislodged. But, after all, Greytown was left to Nicaragua, although two years after that cession Great Britain created a colony in British Honduras, and to this day still keeps a colony there on the strength of an appendix to the treaty, which has never been approved by the President and the Senate—that is to say, by the United States—and therefore is no part of the treaty.

The Lesseps enterprise revived all these questions, and although Messrs. Blaine and Frelinghuysen have defended the views of their Government with ingenuity and ability, both have been more than matched by Lord Granville. The reason is very plain. The American Secretaries have followed a very bad line of attack, as the readers may see from the extracts we have given. They have tried to show that the treaty was not meant to apply to all cases of interoceanic communication, or that the treaty is voidable at pleasure because of Honduras, or that the United States treaty with Colombia conflicts with the Clayton-Bulwer, &c. Now, from all these standpoints the Foreign Office has had no difficulty (except in the Honduras case) in retorting and getting the better in the discussion with the two Secretaries.

Even supposing that Great Britain is not violating the treaty to this day, it is difficult to see why the United States should not ask for a formal abrogation of it on the general grounds that the treaty made thirty-five years ago is most unsatisfactory to the United States of this present day. Because an arrangement was made at that time—and was made against the general feeling of the country—does it follow that it should be kept up for ever?
A dual control of the canal, as that arrangement provides for, is as objectionable to the American Union as a joint guarantee of all nations. But even a dual control would be impossible. Europe can understand why the great Republic wishes to have exclusively the guardianship of a canal across the Isthmus of Panama; but France or Germany, for instance, would not consent to see England joining the protectorate without their also claiming a voice in it. If, therefore, the United States uphold the Clayton-Bulwer treaty they will have at their door a concert of nations—of rival nations—which, with their powerful navies, will compel the United States to maintain a great navy, and thus depart from their settled policy. The canal would become the most sensitive part in the political organism of the United States, and for a long time to come it will tinge their foreign policy even more than the Suez Canal has been tinging the whole foreign policy of England since it has been open. It is impossible to conceive that the United States should rest contented with a joint guarantee of countries with which they have so little in common.

As to the treaty of 1846–48 with Colombia giving the United States any particular advantages of a protectorate over the isthmus transit, it is simply an American illusion. Nothing prevents Colombia from making identical treaties with England, France and other Powers, and when the troops from Washington will one of these days land in Aspinwall, they may find French or English troops already “defending the passage” in virtue of treaty stipulations. If the canal is ever to be finished, we may be very sure that France, whose citizens will have acquired such momentous interests in Panama, will not leave them unprotected by her own guns.
Panama, and in fact Colombia, is much weaker than Egypt. The canal company will virtually control the whole State. One of the late directors of the Panama Railway told the writer of these lines that Colombia was often in debt to his company: what will not be the case with an immense enterprise such as the canal?

And what will be said of the intrigues of the French on the isthmus? Panama wants to be independent of Colombia, and at best is torn by frequent internal revolutions. Must the canal be left to French and Colombian protection?

The more this matter is studied, the more difficult of solution it seems to be for the United States, unless they, having denounced the Clayton-Bulwer treaty, should manage to have a canal of their own, over which they may have absolute control. It is the only way to reduce to a minimum the danger of European complications in America.

The late attempt to pass through the American Senate the treaty negotiated last year with Nicaragua—a treaty which was heartily supported by such an eminent statesman as Senator Edmunds—seems to display a true appreciation of that fact.

One of the New York papers wrote strongly against the United States owning land in a foreign country, as Nicaragua, subject to internal commotions and inhabited by so different a race. Indeed, it is not very desirable for any one to meddle with Central America; but the question which that paper should have asked itself was, which of the evils was the least—the confronting of French and European intrigues as well as native intrigues in Panama, or the owning of a belt of land along the proposed Nicaragua Canal? A Government such as that of the United States, watching over so many and such
varied interests, cannot help having trouble of some kind; but trouble will come; and to let things run as they please may meet the views of self-satisfied people, who believe in their own transcendent wisdom, but it is not government.

For our part we cannot believe that the United States will completely reverse their policy regarding European intervention in America at this late day, a policy which the writer of these lines, who is not American, thinks both wise and indispensable to their happiness. A second canal will be undertaken one of these days. We are aware that the control of an interoceanic canal falls really to the nation that has the strongest navy, and the United States at present have no navy. But not only that condition of things may not last indefinitely, but whatever disadvantage the American Union has now in that respect is counterbalanced by the great advantages of neighbourhood to the future canal—a canal held and fortified under its auspices.

On the other hand, we do not see how Great Britain can give up to the United States the absolute control of the Panama route. She has perhaps as great a commercial interest in the canal as the United States, and besides that, she has whatever advantages accrue to her from her powerful navy and from the Clayton-Bulwer treaty.

When, therefore, we weigh the interests of Great Britain and those of France with the interests, political and commercial, of the United States, we cannot help coming to the conclusion that the United States, having by the indolence of their statesmen let this canal question assume a disagreeable form, should do their best now to counteract their past errors by constructing and assuming exclusive control of a canal of their own.
In January 1880, Senator Bayard, the present Secretary of State, warned the country that the American canal "must be under the control of the Government of the United States. Our power," he continued, "may be questioned, but it will be maintained. Every counsel of wisdom, therefore, exhorts us to seize the day, and in time of peace prepare for war, for it is the surest mode to avert it." (See the New York Nation, No. 762, February 5, 1880.)

It is not likely, we repeat, that Secretary Bayard will think differently from Mr. Bayard, the Senator.

The idea of a second canal, even supposing that M. de Lesseps might finish the Panama, is by no means a novel one, and it occurred to such an authority as the Economiste Français as early as July 1879, just when M. de Lesseps had bought M. Bonaparte-Wyse's concession from Colombia. The Economist (London, July 26, 1879), referring to that article of its Paris namesake, wrote as follows:---

"The dark point in the present plan is that another practical line can be made further to the north, which is not included in the concession to M. de Lesseps' company. This is the line through the republics of Nicaragua and Costa Rica. It is nearly four times as long as the other line, and it requires twenty-one locks. At neither end are there good harbours, but it can be constructed without any tunnel, and the River San Juan and the lakes of Nicaragua and of the Rio Grande can be utilized. To compare estimates of the cost of the rival routes seems of little use, as the expense of these immense undertakings is very uncertain. The Economiste Français looks forward to seeing both enterprises carried out, in which case it appears impossible to calculate beforehand which of the two lines may obtain the principal part of the traffic. But whether either or both of these lines are made, it appears certain
that American shipping, and not European, will be the gainer. The economy of time in the transit from the two sides of the vast continent of America, now conducted \textit{via} Cape Horn, will be an enormous gain to American shipping. In the transport of goods to the Pacific coast from the ports which open into the Atlantic the gain to American ships will be very great. At present the voyage by steamer from New York to San Francisco, to Callao, to Valparaiso, to the Sandwich Islands, takes but little more time on an average than the voyage from the Channel to those ports. But when the canal is constructed the American ports will be far nearer than Caupi, as far as length of transit is concerned, than even the nearest European ports. The work, however, when completed, must be left to produce its own results. We shall accept it in England as one of the inevitable consequences of the increasing desire for increasing intercommunication, and we do not question that though, owing to the fact that American trade on the Atlantic and the Pacific coasts will benefit so largely by the improved means of transit, it is hardly likely that the proportion of English shipping will be as great as in the case of the Suez Canal, we have equally as little doubt that English enterprise will find full employment in utilizing the opportunity given it, and that England will reap the full advantage from the economy in transport which may be expected to result from the completion of the plan."
CHAPTER XVIII.

CONCLUSION.

Our investigation of the Panama Canal must now be brought to an end. As we stated at the beginning our purpose was to study how the enterprise was brought to life by M. de Lesseps, how he has used the resources placed at his command by his fellow-countrymen, and what future is in store for the whole undertaking. We will now recapitulate the conclusions to which we have been led by this investigation.

1. Since the last century the project of building a canal through the American isthmus has been often discussed, but it was only in 1851 that the first semblance of a regular survey took place under the auspices of the United States. Other surveys followed, but the enormous difficulty of the work, which entails so much expenditure of life and money, and which, even if satisfactorily solved in its engineering aspects, was considered as promising but doubtful financial results, contributed to the delay of a systematic and comprehensive study of the whole question. Lately, however, the Government of the United States undertook that task, and organized a series of surveys by proficient officers and engineers, their studies being submitted to a superior committee of revision, which, after the most careful examination, decided that, taking everything into consideration, the Nicaragua route was the best.
In the meantime some Frenchmen conceived the idea of undertaking to build a canal, and of securing the services, the experience, and the honoured name of M. de Lesseps. They went to Central America, and obtained, in the last days of the administration of President Parra of Colombia, a concession from that State to cut a canal through its territory. The Panama line had been studied by the United States officers and abandoned. The two French naval officers examined it in eighteen days, and resolved to take it up. Those eighteen days were deemed sufficient for the organization of a plan, or rather of two plans, for a canal with no locks nor tunnel, and for one with a tunnel.

M. de Lesseps lent his name to the enterprise, and in order to impress a scientific stamp upon the survey of eighteen days, and upon the "choice" of a route for which he and his associates held a concession, he called together a "Congress" of scientific men and non-scientific men—most of them French, and persons invited by himself or through his suggestion, including thirteen employés of the Suez Canal Company. The "Congress" met in May 1879—one year after the date of the Wyse concession. The transactions were planned by M. de Lesseps, who organized the committees to suit himself—that is to say, to select the Panama line, which had only been properly studied to be condemned. In spite of his care in packing the committees, everything did not run smoothly for M. de Lesseps. Admiral Ammen and Mr. Menocal, delegates from the United States, demonstrated the absurdity of the Panama line and the perfect adaptability of the Nicaragua line. Their lucid report shook the credulity of many friends of M. de Lesseps on whom he depended. But the Congress was composed of men who, either through respectful deference, genuine admi-
ration for and confidence in M. de Lesseps, or from some other motive, were bound to follow him blindly; and although such men as MM. Lavalley, the constructor of the Suez Canal, Cotard, Ruelle, and others, showed in their committees that the Panama project was a great "unknown" (as M. Cotard said), and although in fixing upon the details of the scheme the committees did not altogether suit M. de Lesseps' purposes, the Congress selected the Panama project as the best, and declared that the canal, exclusive of the contingencies of the "unknown" problem of the River Chagres, and presupposing that there were only 46,000,000 cubic metres of excavations, would cost from 1,040,000,000f. to 1,070,000,000f., or say £42,000,000.

2. While every serious man who had watched the proceedings of the Congress was deriding them, M. de Lesseps, in less than sixty days after the Congress dissolved, became the lawful owner of the concession. He appealed for money, but the French public did not respond; the impression prevailed that the Americans were not favourable to the canal, that there had been no proper surveys, and that the Panama line was unfeasible. M. de Lesseps then went to Central America, taking with him a very respectable Dutch engineer (who at the Congress had warmly advocated the Panama line), a good mining engineer, and some very inferior young persons, some of whom accompanied him for the pleasure of the trip. In Panama, they were joined by two fifth-rate Colombian engineers, by Colonel Totten, who had always condemned in the press the tide-level route at Panama, and a man said to be an American engineer, but utterly unknown in the United States. The "International Technical Commission" was thus organized, and its members are stated to have verified the eighteen days' surveys
in about six weeks. The Commission found there were 75,000,000 cubic metres of excavations instead of 46,000,000, and decided to handle the Chagres exactly as had been suggested by Commander Bonaparte Wyse—by far the ablest man connected with the Panama Canal scheme. As to the estimate of expenses, as compared with that of the Congress, the Commission found that the canal would cost far more than the Congress thought. If every item of the estimate is taken by itself, the truth of that statement is evident; but the Commission not only eliminated several important items, just as indispensable as excavation, but reduced the contingent expenses from 25 to 10 per cent.—expenses which in the Suez Canal amounted to 128 per cent., and which the United States Committee of Revision fixed at 100 per cent. The "international" Commission placed the cost of the canal at 843,000,000$, or about £33,720,000, against £42,000,000 as fixed by the Congress, which only estimated for 46,000,000 instead of 75,000,000 cubic metres of excavation.

M. de Lesseps was not satisfied even with that apparent reduction of £8,280,000. On his voyage to New York, on board the steamer Colon, he cut down the estimate of his Commission still further, reducing it to 658,000,000$, or £26,320,000—a reduction of £15,680,000 from the estimate of his own Congress, and of £7,400,000 from that of his own Commission, which found, we repeat, about 60 per cent. more excavation to be done than had been anticipated by the Congress.

While in the United States M. de Lesseps visited Washington for a few days, just when President Hayes was declaring that the Union was bound to have exclusive control of whatever canal might be built.
3. On his return to France M. de Lesseps assured the public that the construction of the Panama Canal was very easy compared to that of the Suez Canal, that the Americans were now very friendly to his idea, and that MM. Hersent and Couvreux would build the canal for six or seven hundred millions of francs. He again appealed for money, this time successfully. No less than 102,230 persons applied for shares, and of that number of applicants less than twenty shares apiece were allotted to 99,982. The company was forthwith organized. The 50 per cent. call on the shares produced £5,900,000. Out of that sum £1,800,000 went at once into the pockets of the promoters and concessionaires. In March 1881 the company was definitely organized.

4. In May 1885, four years later, M. de Lesseps had raised, besides the £5,900,000 already alluded to, £5,000,000 in 1882, £12,000,000 in 1883, and £7,747,740 in 1884 altogether £30,647,740; or, deducting the discounts at which the three loans were issued, £22,275,000.

In return, M. de Lesseps has bought the Panama Railway and a quantity of machinery, besides making an "installation," which is pronounced as very good. As to the work in the canal proper, he has found that there are 125,000,000 cubic metres to be excavated, instead of 46,000,000 and 75,000,000; and he is said to have taken away 13,000,000, or about 11 per cent. of the total, as at present estimated. The Chagres problem is still unsolved. No complete surveys of the basin have been made; the 112,000,000 metres still to be excavated will cost about £28,000,000 and the canal officers estimate the Chagres and harbours improvements to cost £8,000,000—a total of £36,000,000. Adding the money for interest and amortization during the
period of construction, which at best cannot be less than nine years, and £3,000,000 for administration in Paris and Panama, we have a total of £77,000,000 still to be raised in cash, besides the £30,700,000 already raised. Excluding the discounts, the net sums to be raised are still £58,000,000 in solid cash. This, we repeat, is without allowing for contingent expenses, and on the hypotheses—(a) That the work will be done in nine years, which is not deemed possible by most authorities; (b) that the excavations yet to be done do not exceed 112,000,000 cubic metres; (c) that the improvements of the harbours and the Chagres are to cost only £8,000,000, a figure that, to judge from what is known of the Chagres, might just as well be £80,000,000.

It is evident, therefore, that too much money has been spent already, and comparatively little work has been done. It does not seem as if the several contractors are pushing even the easiest work at the speed agreed upon.

It is also evident that the present company cannot finish the work, if it ever is to be finished. Bankruptcy is inevitable, and on the isthmus it is said that M. de Lesseps already thinks of abandoning the tide-level plan for that of locks, which is the plan that M. de Lesseps said at the Congress of 1879 he would never lend his name to. The impression on the isthmus is, that, once bankrupt, the company will appeal to the French Government to finish the work in which so many thousands have invested money.

5. M. de Lesseps has been persistently perverting estimates and facts and making promises as to the cost and conclusion of the works, which anybody who may obtain a file of his own publication, the Bulletin du Canal, can easily verify to be absurd. Thus, to give a
single instance of this systematic misrepresentation, in September 1883, M. de Lesseps, while applying for more money, promised that in a few months the output of excavation would increase from 210,000 metres (the total for the previous July) to 2,000,000 cubic metres a month; and yet to this day (end of May 1885) the monthly excavation has never reached even 800,000 cubic metres.

6. The French periodical press, which should be watchful of the interests of the thousands of small investors in the Panama Canal, is only careful to ignore all just criticism, and to puff the "genius" of M. de Lesseps. There has not been in France any paper with independence enough to make a thorough study of this Panama Canal business, and, among the so-called respectable dailies, the Journal des Débats has been pre-eminent in deceiving its readers. The truth can easily be found in the official publications of the canal company, in spite of the fact that they are edited with extreme care in the interests of the promoters and directors of the company. All criticisms from foreign observers and students is treated as so much envy of M. de Lesseps' glory, and is answered with an appeal to the history of the opposition to the Suez Canal. These men forget that just because we are perfectly well aware that there was such opposition (principally political and rather justified), we, the independent and impartial critics of M. de Lesseps' doings in Panama, should not bring forward against him the accusations that we bring without being deeply convinced of their serious and unimpeachable character.

7. Even if the canal could be ready in nine years, and should start business with 5,000,000 tons (instead of 3,200,000 as calculated in the United States for the
Nicaragua Canal), the outlook of the company, with a capital in shares and bonds of £107,000,000 would be the annual deficiency of £3,300,000. That result will be owing to the bad selection of the line and to the extravagant manner in which money has been spent. The facts, well authenticated, prove that the line was selected without any judgment whatever.

8. Supposing that the Panama Canal under French auspices should be finished, the fact of Colombia becoming a new Egypt is most distasteful to the United States, where there is but one opinion about a European guarantee of the neutrality of the canal conjointly with the United States. The policy of that Government is a sole and exclusive guarantee of its own; and if the Government cannot now enforce that policy without further complications, its peace and safety will compel it to have a canal constructed at Nicaragua under its own auspices. Last year the President arranged with Nicaragua for that purpose, and the Senate set the treaty aside only for incidental causes, which can be removed without much difficulty.

Such are the conclusions at which we have arrived.
POSTSCRIPT.

THE LATEST REPORT OF M. DE LESSEPS.

Since the foregoing pages have been written, the annual meeting of the Panama Canal Company was held on July 29, and M. de Lesseps has presented his Report for the year ending June 1885. It is a long document, accompanied by a memoir about the undertaking, and by the usual "Inventaire," or financial statement, for the preceding year, which in the present case is 1883-84.

M. de Lesseps discourses at length about the success of the Suez Canal, and protests against the violent opposition made to him by a few papers in Paris, which are not, he is glad to say, conducted by Frenchmen. The opposition to the Suez Canal was directed by certain foreign papers: now, he adds, though the papers are Parisian, they are edited by foreigners. He complains that papers and pamphlets are published specially to damage the canal; but unfortunately it is M. de Lesseps himself who, by his large subsidies to the native press, has encouraged the creation of such sheets and brochures with the main purpose of extorting money from him.

Passing to the business of the canal, M. de Lesseps is, if anything, more unsatisfactory in his statements than he has ever been during these five years. He has suppressed one of the features of his previous reports—the summing-up of the cubic metres of excavation made from the beginning.
He admits now that the grand total will reach $120,000,000, but he does not say how many have been removed up to date, contenting himself with showing the result for January to May, which, by the way, although in all probability grossly exaggerated, is summed up at $3,340,000, or an average of $668,000 per month—a figure, indeed, very different from the $2,000,000 a month which, according to his promises in September 1883 (see page 121), was to be the output every month from and after 1884.

M. de Lesseps reviews the work that is being done at the several sections and the cost of the canal line, and then gives us a sanguine account of the expected traffic. Lastly, he gives notice that he has applied to the French Government for permission to issue $600,000,000 of debentures with lottery prizes. That sum, he says, is all that is necessary, "d'ici à l'achèvement complet des travaux."

His report is not a straightforward statement, not only as to work done, but also as to probable cost and the expected traffic of the canal.

Not one word is said about the great difficulties presented by the River Chagres.

He has a special paragraph about the cost of the canal which is grossly misleading, and inconsistent with itself.

He does not say how much excavation has been done. He does not state properly how much the company is owing, for he now suppresses from his scheme the discounts at which the bonds have been issued, as well as the cost of the Panama Railway, from which company he bought not only a road which, he said, he would have to build if it did not exist, but also the right of way which had been given to it for a canal in Panama by the Colombian charter.

M. de Lesseps, moreover, mixes up his figures so as to produce the impression that when he gives the mere cost of excavation, according to some contracts now in force, he really gives the cost of the canal. He continues to exclude from his already worthless calculations the outlay on the Chagres, interest during construction, administration—in short, everything except excavation; and he then parades the supposed cost of the latter for the cost of the canal.
We will give a few instances of the peculiar methods by which he manipulates his figures and information. We will take, for instance, the last named topic, the "cost of the canal," to which he devotes a special chapter.

As we have shown in pages 76 et seq., M. de Lesseps, in the autumn and winter of 1880-1, repeatedly assured the public that the cost of the canal, fully completed, would be 700,000,000, including 100,000,000 for any contingency. The *Economiste Français* of August 1, 1885 (we dare say he does not call that paper a paper edited by foreigners), reminds him that, in his *Bulletin du Canal* of December 1, 1880, he assured his readers that MM. Couvreux and Hersent had offered to take firm (à forfait) the contract for building the canal for 512,000,000, or £20,480,000, and that adding 88,000,000, or £3,520,000, for interest during construction, administration, &c., the total cost of the canal would be 600,000,000, or, anyway, 700,000,000. — equivalent to £28,000,000. We have already remarked that M. Couvreux and Hersent never took such a contract. But we wish to repeat that M. de Lesseps has all along, since the formation of his company, said that the canal would cost at most 700,000,000, including all expenses. Once more we will recapitulate the several estimates that have been made:

1. M. Bonaparte Wyse, 1879 (without contingencies) . . . . . 427,000,000
2. Congress of Paris, 1879 (with everything except the Panama Railway and the handling of the "unknown" problem of the Chagres, and supposing the cube to be excavated to amount to only 46,000,000 metres, instead of the 120,000,000 metres as now admitted by M. de Lesseps) . . . . . . . 1,070,000,000
3. M. de Lesseps' own "International Commission," February 1880 (including contingencies, but excluding administration, banking, discounts, &c.) . . . 843,000,000
4. M. de Lesseps himself, February 1880 (while on his voyage from Panama to New York he cuts down the estimate of his own "Commission"—see Bulletin du Canal, No. 14, page 116. This estimate excludes interest, &c. as above) . . . 658,000,000

5. "Rectified" estimate, September 1880 (two months before appealing for money. Attributed to MM. Couvreux and Hersent, and not including interest, banking, &c.) . . . . . . . . . 512,000,000

Or, "including all expenses, and these exaggerated too" . . . . . . . . 700,000,000

But after having repeated during all these years that the total cost of the canal was to be 700,000,000 francs., the great Frenchman now turns around once more, and boasts in his latest edition of an estimate that the total cost is exactly that which had been foreseen by the Congress of 1879!

Of course, we know very well, and he knows it too, that the canal will cost much more than twice as much as estimated by the Congress, which, after all, reckoned only on less than 40 per cent. of the excavation already admitted at present, and, besides, did not include the Panama Railway purchase nor the "unknown" problem of the Chagres. But even here M. de Lesseps is far from frank, and resorts to his usual tactics in order to make his shareholders believe that the canal will cost no more than 1,100,000,000 francs., or £44,000,000, instead of the £28,000,000 which he has often stated to be the outside figure.

He has, under the head of "Cost of the Canal," two paragraphs which are characteristic. They follow each other. The first says that the present contractors, now at work, have agreed to do excavations at the average rate per cubic metre of 3'34 francs. for soft soil and 8'60 francs. for solid rock. Instead of following up that demonstration to its legitimate conclusion, adding the sums already spent to both the cost of removing soft soil and hard rock still to be taken away,
and then adding the banking, administration, discounts, improvements in the Chagres, and other charges, M. de Lesseps does nothing of the kind. He stops there, and then writes this extraordinary paragraph, which we will reproduce from the original:—

"Les contrats passés avec les deux entrepreneurs qui se sont engagés à livrer le Canal complètement terminé jusqu’au plafond nous permettent d’établir la dépense des travaux de parachèvement, lesquels s’élèveront à 480 millions de francs. En ajoutant cette somme à la somme engagée de 220 millions de francs, nous arrivons à la somme de 700 millions de francs qui sera le coût du canal maritime le jour de son inauguration."

And he then adds:—

"Il faut nécessairement ajouter à cette évaluation du coût du creusement, les charges sociales et administratives annuelles, les intérêt à servir aux actions et aux obligations, pour arriver au total général proclamé par le Congrès international."

Our readers will perhaps be surprised to hear that there have never been "two contractors who have been engaged to deliver the canal finished to the bottom." That story matches the former one, to which the Economiste Français referred, of MM. Couvreux and Hersent having taken, firm, the contract for building the canal for 518,000,000£.

Even apart from the fact that there are no such contractors, the story itself is not coherent and would fall to the ground. M. de Lesseps says that 480,000,000£, or £19,000,000, will finish the canal, besides the 220,000,000£, or £8,800,000, "already engaged." Admitting those figures, what would become of those sums already spent in the canal? The memoir accompanying the report says that 203,660,000£, or £8,146,400, have already been outlaid in installation and digging. What is to become of that sum? Is it included in the £8,800,000 "already engaged" in the contracts with the present contractors?

Moreover, he says that to the cost of the canal digging, or 700,000,000£, there should be added the money necessary
for interest, administration, &c., and then we should have "arrived at the total announced by the International Congress." This is still another misstatement. The difference between that sum and the total announced by the Congress is only 400,000,000, or £16,000,000, and what M. de Lesseps says is that the total cost besides canal digging will not exceed £16,000,000. Yet in the memoir accompanying his report we find that the company, while it has only spent, as aforesaid, £8,146,400 in cutting the canal, yet it has raised the net sum of £23,226,960 (or £6,000,000 more than in our statement on page 166, as we did not take into account the counter-interest earned by the dormant capital, the data of which is now for the first time published). It follows therefore that, deducting the above £8,146,400 and the £4,121,560 in cash on hand in July last—a total of £12,268,000—the rest of the net sums raised has gone for those expenses, which M. de Lesseps says will not exceed £16,000,000. In other words, while on July 1885 he says that he has had the net sum (exclusive of discounts) of £23,226,960, and has spent in other purposes than canal-cutting the sum of £10,959,000 (which is the round difference between £23,226,960 and £12,268,000), he now says that these expenses will amount to no more at the date of the inauguration of the canal than £16,000,000, or only £5,000,000 beyond the sum already spent!

And as if that were not distorting the facts enough, the President of the Panama Company takes only into consideration the net sum that he receives, caring nothing at all for the heavy discounts at which his obligations are issued, as if they were of no account whatever, or were not liabilities of the company. He forgets that the interest and amortization on the capital already raised requires about £1,400,000 per annum, and that if the canal is to be ready, as he is still promising, in July 1889, he needs £5,600,000 for that service alone, which is already more than the margin that he has, in his own theory, for such expenses, and so that they may come within the so-called calculations of the Paris Congress. He also forgets that in this report of his own he announces that he must issue £24,000,000 more, and that
interest must be paid on that sum for the time being. He also forgets that, besides the interest, he has to provide for the discounts or lottery prizes, as the case may be. Finally, he forgets that the Paris Congress also reckoned something for other works than canal-digging.

In short, not only is M. de Lesseps' theory a fatuous presumption of mere imagination, but even admitting it for the sake of argument, it is impossible to make it consistent with its own premises.

We will give just one instance more of the way in which M. de Lesseps makes his statements. In his canal there is a section—that of Culebra—which is one of the hardest, because it is the highest; but it is only two kilometres in extent, and there is not so much solid rock in it as in the Emperador section. In his report M. de Lesseps takes great pride in saying that certain contractors are about to undertake to cut the two kilometres down to the bottom of the proposed canal. According to the projet de contrat (which contract M. de Lesseps, with characteristic zeal, calls at once un fait) the average price of that excavation will be 8 francs on a quantity of metres that he admits to be 20,000,000. We call attention to the fact that not only the contract had not been signed, but also that, according to the profile accompanying the report, the Culebra is not so difficult a section as that of Emperador, which measures close on five kilometres, and has the greater quantity of hard rock to be taken away. To that section the report only devotes seven short and meaningless printed lines.

And as M. de Lesseps is now admitting that there are 20,000,000 cubic metres in the two kilometres of the Culebra, we may as well recall here that his "Commission Internationale" found that the whole forty-seven kilometres of the canal comprised no more than 28,500,000 cubic metres of both semi-hard and hard rock! It will be remarked also that when, in our estimate of cost of finishing the canal, we took (page 168) five shillings as the average price per metre, we really favoured M. de Lesseps, who is now delighted to announce that the semi-hard section of the Culebra will be done at 8f., or 6s. 4½d. (That the section is only of semi-
hard rock we learn now from the profile accompanying the report.)

But we must conclude our remarks, and in doing so we are glad to hear that the Economiste Français promises now to make an étude d'ensemble on the Panama Canal.

We feel sure that any impartial critic, who should study the history of this company without fear of the talisman that seems to be hidden behind the name of M. de Lesseps, will arrive at the same conclusions that we were led to. Our data are derived from official sources which are accessible to everybody at very little expense. Our deductions from them may be wrong, but, if so, the fact ought to be shown to us by the ordinary process, and not by an appeal to the Suez Canal. This book is about the Panama Canal.

THE END.