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THE AMERICAN INTER-OCEANIC CANAL, AN HISTORICAL SKETCH OF THE CANAL IDEA

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SESSION OF THE PANAMA-PACIFIC HISTORICAL CONGRESS

Held at Native Sons Hall, San Francisco July 23, 1915

The convention was called to order at 8:30 P.M. by the Chairman.

The Chairman: Ladies and Gentlemen: this last session of the Panama Pacific Historical Congress will be distinguished by the reading of a paper on "The American Inter-Oceanic Canal: an Historical Sketch of the Canal Idea," by Mr. Rudolph J. Taussig, Secretary of the Panama Pacific International Exposition.

Mr. Taussig will tell the story of the idea of making a canal. It is practically the same thing as the history of the idea of making the Panama Pacific Canal, which opens a new era in the history of the Pacific Ocean.

I have the aid on the platform here of two distinguished delegates, one from Spain and the other from Japan. During his presence at the Congress, by many speeches and in many ways, Professor Altamira has endeared himself to those who are responsible for this Historical Congress. Professor N. Murakami has, in the excellent paper he read today at Palo Alto, shown that the new land of Japan is as interested in things of the Pacific Ocean as the old land of Spain. To support them two former presidents of the American Historical Association, Professor Turner, of Harvard University, and Professor Jameson are here present. A little later we are to be favored by another former president of the American Historical Association, who, while he has written history, has also made it, and who has promised to be present shortly to tell us how he made the Canal, which Mr. Taussig will trace from its original idea.

I present to you Mr. Rudolph J. Taussig.

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THE AMERICAN INTER-OCEANIC CANAL: AN HISTORICAL SKETCH OF THE CANAL IDEA ¹

RUDOLPH J. TAUSSIG

The task assigned to me by the President of the American Historical Association for the Panama Pacific Historical Congress of 1915, is perhaps the only one which might possibly lie within the power of one who, like myself, is not a trained historian. There are no evidences to be weighed — one against the other — nor is there any great question to be solved concerning the reliability of the sources of information.

The materials that could possibly be made use of are first, the records of voyages made in search of "the secret of the strait" which would permit a direct passage of ships from Europe to far Cathay by sailing westward, and second, the various schemes advanced for making such an artificial strait by the work of man in default of a natural one already existing.

I must however ask your indulgence, as it was by no means easy to reduce the great amount of available material to the limits of a short paper.

It took a little over four centuries of search, of diplomacy, and of work to present the world with the completed water-way and only the merest outline of its historical development can possibly be attempted here. The poet's dream of the mingling of the waters of the Atlantic and Pacific across any part of the American continents from the Straits of Magellan to the Arctic Ocean must remain a dream until waters run uphill and cross a range of mountains or until the mountains themselves are moved away.

¹ Whatever may be "worth while" in this sketch is due to the friendly advice of Professor H. Morse Stephens, the kindly assistance of Assistant Curator H. I. Priestley of the Bancroft Library, and Assistant Professor Chas. E. Chapman, of the University of California, and the courtesies of Librarian Frank B. Graves of the Mechanics-Mercantile Library of San Francisco.

A small water-way between the oceans was established within the boundaries of the Republic of Colombia in the state of Chocó. but it could only be used in the time of heavy rains. of the Raspadura unites the sources of the River San Juan, which flows into the Pacific, with one of the tributaries of the River Atrato, which flows into the Atlantic. In 1788 the curé of the village of Novita employed his parishioners, who were mostly Indians and negroes, to dig a small canal in this ravine by means of which, when the rains were abundant, canoes loaded with cacao could pass from ocean to ocean. Humboldt said that this interoceanic communication was unknown to the Spaniards in Europe and gave the distance from sea to sea as about 300 miles, but it was certainly known to them in the first decade of the 19th Here then is an account of a canal without locks, dug between the headwaters of two great rivers which flow in opposite directions.

Humboldt stated his belief that he was the first to mention it in Europe. He said that it might easily be enlarged if other available streams were joined to it and that feeding trenches might easily be established in a country like Chocó, where it rained during the whole year and where thunder was heard every day. Continuing he said "that the ministry at Madrid never enjoined the Viceroy of New Spain to fill up the ravine of Raspadura or to punish with death those who attempted to reëstablish a canal at Chocó, as has been asserted."

There is also an account of the mingling of the headwaters of two rivers on the Isthmus of Panama during the heavy winter rains, which is perhaps of equal importance with the mingling of the waters of the Mississippi and the St. Lawrence rivers during the time of the spring freshets—poetically true but of no practical value.

The publication of the travels of Marco Polo at the end of the thirteenth century acquainted Europe with the port of Zaitun, with the name of the Great Khan, with the country of Cathay, and with the enormous riches of the Orient. The merchant adventurers of Venice and of Genoa were eager to open commercial relations with the Far East and overland trade routes were established,—long in distance and fraught with danger to person and property.

A shorter way to the Orient was a dream without hope of realization so long as the belief prevailed in Europe that the earth was flat, — beginning at the water's edge of the fierce Atlantic and ending at the sea beyond Cathay.

According to an account which has lately been questioned, a Florentine astronomer, Paolo Toscanelli, expressed his opinion in a letter to the King of Portugal that the earth was round, and in 1474 sent a copy of the letter to Christopher Columbus. Columbus had come to the same conclusion, namely, that by sailing westward he would reach the islands and mainland of Japan and China. nor did he think that the undertaking would be so difficult nor the voyage so long as some supposed. In order to prove his conclusion and to present Europe with a solution of the problem of a short way to Cathay and its enormous wealth, Columbus began his long campaign for the necessary assistance. He was finally fitted out by the monarchs of Castile and Aragon for a voyage across the unknown sea to India. He never knew that he had discovered a new continent and could not understand why he could get no information concerning the Great Khan at the city of "Guesay," to whom he carried letters from Ferdinand and Isabella. While preparing for his fourth and last voyage, he requested permission to carry with him one or two men versed in the Arabic tongue, and the letter from Ferdinand and Isabella dated March 14, 1502, granting his request, provided it should not detain him too long, is of record.

In writing to Spain from Jamaica, on July 7, 1503, Columbus stated that he was within seven days' journey by land from the province of Ciguare, which was but ten days' journey from the river Ganges, and that when he was upon the coast of Veragua he was relatively in the same position to Ciguare as Tortosa on the Mediterranean to Fuente on the Bay of Biscay, or as Pisa on the Ligurian sea to Venice on the Adriatic, indicating in this way his information concerning the existence of another sea. No doubt this but increased his eagerness to find the strait which would permit him to reach his destination, although he seems to have satisfied himself that it did not exist anywhere within the territory which he himself had visited thus far, that is, from Cape Gracias á Diós in Nicaragua to the Gulf of Paria in Venezuela.

It was ten years later that the sea of which Columbus had been told was first seen by Europeans when Balboa led his expedition across the Isthmus of Panama in 1513. Balboa had also heard of this great sea lying south of his city of Santa María de la Antiguedad del Darien on the Gulf of Urabá, and had been warned by his friends amongst the natives of the great difficulties attending the crossing of the mountains, and the necessity of a large force of men to overcome the hostile nations which would bar his progress. But the lure of gold and pearls permitted no obstacle to stand in the way of discovery and wealth. Balboa did not long enjoy the fruits of his expedition, for he was executed in 1517. With the founding of the city of Panama in 1519 even the city of Santa María, to which he had devoted himself and which was the last vestige of the early schemes of colonization of Nicuesa and of Hojeda, gradually disappeared.

Animated by news of the voyages and discoveries of Columbus, John Cabot and his son Sebastian undertook to find a way westward to where the spices grew. Judging from the form of the sphere that the voyage would be shorter if they sailed in a northwesterly direction they prevailed upon Henry VII of England in 1497 to provide them with two vessels for their purpose of discovery. They expected to find Cathay, and from there turn toward India. They reached the American continent and sailed, perhaps, as far north as 56° latitude and as far south as Florida. Failing to solve the secret of the strait, they returned to England.

The persistence with which this secret (of the strait) was now pursued would seem remarkable were it not for the ignorance which so long prevailed concerning the geography of America. Even as late as 1843 Gen. J. C. Frémont in his report upon the exploring expedition to Oregon and North California speaks of his search for the Buenaventura River "which," he says, "has had a place in so many maps, and countenanced the belief of the existence of a great river flowing from the Rocky Mountains to the Bay of San Francisco."

In 1514 the King of Spain directed Juan Díaz de Solís, who was sailing for the new world under the King's orders, to find out if

the country we now call Central America were not an island. In 1519 Magellan sailed from Spain in search of the shortest way to the Spice Islands, and the straits that bear his name tell the story of his success. He was the only one who did find a way from the Atlantic to the Pacific without sailing around Cape Horn. This however was not particularly satisfactory, as it was too far south and the navigation stormy and difficult.

In 1521 the Emperor Charles V acknowledged the services of Francisco de Garay for having attempted, though unsuccessfully, to find the strait and three years later Lucas Vásquez de Ayllón was directed to continue the search.

By 1525 it was generally conceded that there was no passage from sea to sea between Florida and the Gulf of Darien (or Urabá), and more attention was paid to the latitudes farther north. Estevan Gómez in that year announced his ability to find the strait north of Florida. He returned to Spain after a voyage of ten months, naturally without success, but a misunderstanding of words when he arrived spread the report over Europe that the straits had been found. He brought some Indian prisoners with him who were to be sold as slaves, and due to a confusion of the word "esclavos" (slaves) with "clavos" (cloves) the news went abroad that he had found a way to the land of spices, and for a time considerable credence was given to the rumor.

About the same time Pedrarias Dávila, who had been made governor on the Isthmus and who had sent expeditions to explore the country in the neighborhood of Lake Nicaragua, where the city of Granada was founded in 1523, expressed his conviction that there must be some connection between Lake Nicaragua and the South Sea, only three leagues away. He was certain that this would be found, and the passage from the Atlantic by way of the San Juan River completed.

In 1527 Hernando de la Serna was ordered to explore the Chagres River which flows into the Atlantic and the Río Grande which flows into the Pacific not far from the city of Panama. He it was who reported that at high tide the waters of the two rivers mingled and could be navigated with small boats from sea to sea.

Cortés after his conquest of Mexico devoted time and energy to the exploration of both the Atlantic and Pacific coasts, endeavoring to find a way from ocean to ocean. He sent a small fleet up the Atlantic coast from Florida and also fitted out several expeditions on the Pacific at Tehuantepec. The latter resulted in the discovery and exploration of the Gulf of California.

The Emperor Charles V in 1534 ordered experts to examine the land lying between the Chagres River and the South Sea, and to report upon the proper means to connect the ocean with the river at its head of navigation. They were also to report upon the cost of its accomplishment in time, money, and labor. Pascual Andajova, at that time governor of the province, on October 22 replied to the Emperor's orders to assist in this work, that he would do so in the following spring as it was impossible to accomplish anything during the winter. At the same time he asserted that no prince no matter how powerful he might be could accomplish the union of the two oceans nor provide means for connecting the ocean with the river, but that in order to maintain a road between Nombre de Diós and Panama and to clear the Chagres River to the head of navigation, all that would be necessary would be to provide him with fifty negroes, who would do the work and maintain the road at but little cost.

In 1542 Juan Rodríguez Cabrillo sailed from Navidad and sighting the coast of Lower California on July 2 explored the coast northward and entered San Diego Bay. Although Cabrillo died in January 1543 the voyage of discovery was continued, the expedition reaching as high as 44° N. latitude. Naturally no strait through the continent was found.

Gómara, the Spanish historian whose *Historia General de las Indias* first appeared at Saragossa in 1552–3, wrote that the voyage from Spain to the Moluccas by way of the Straits of Magellan

was long and dangerous.

Speaking with men well versed in the affairs of the Indies he had heard of a good site for a canal, the completion of which though costly would not only be advantageous but would bring glory to any one who would undertake it and accomplish it. This passage would have to be built through Tierra Firme from one ocean to the other by one of the four following routes:

First, by way of the Chagres River, which rises within four leagues of Panama, or

Second, by way of the San Juan River to Lake Nicaragua, which is only three or four leagues from the Pacific Ocean, or

Third, from the River of Vera Cruz to Tehuantepec, or Fourth, from the Gulf of Urabá to the Gulf of San Miguel, a distance of twenty-five leagues.

The last two he considered the most difficult. There were lands to overcome, he said, but there were hands to do it. The spirit would not be wanting where the money could be obtained and the Indies where the work was to be done would provide it. If this passage were built one third of the distance would be saved and for the trade in spices, for the wealth of India, and for a king of Spain the work was but a small affair.

An account is given in Purchas' *Pilgrims* of a Portuguese named Martin Chacke who claimed to have sailed from the East Indies to the North Sea through a passage in latitude 59° N. in the year 1565. During a severe storm his ship was separated from the balance of the fleet that he was sailing with, but by finding this passage he came to anchor at Lisbon four or five weeks in advance of his companions.

Again came the rumor that in 1556 or 1557 Andrés de Urdaneta had discovered the passage between the seas and that Salvatierra had traced it on a chart. No documentary evidence of this has been found. In a later report to the government, Urdaneta wrote that news had been received in New Spain of a passage discovered by the French, who had entered it by way of the coast of Labrador at about 70° N. latitude, thence sailing S.W. to below 50° had found an open sea easily navigable to China. Furthermore, said he, a passage had been discovered farther south by the same explorers, and Spain ought at once to investigate the matter; if found true, the entrances ought to be fortified for protection against foreign aggression or use.

In 1590 Padre José de Acosta in his Historia Natural y Moral de las Indias wrote that there were some who said that the land would be submerged if an opening were made between the two oceans, as the level of one was lower than the other, and that for the same reason the Red Sea had never been connected by canal with the waters of the Nile. In his opinion no human power would suffice to level the rocks and mountains which God had placed between the two oceans in order to withstand the fury of the waves. The frequent disasters which befell expeditions through the

Straits of Magellan and the great cost of that voyage made transportation across the Isthmus far more desirable. While for this purpose Nombre de Diós, the Atlantic terminus of the road to Panama, was fortified to protect the road against pirates, the Straits of Magellan were forgotten even to the point of doubting their existence.

It may be proper here to mention the story concerning Philip II, who is reported to have prohibited further consideration of an inter-oceanic canal. A later Spanish writer states that if such an order were issued, it was done to prevent so far as possible any further aggression upon the part of other nations. An attack upon the Spanish possessions would have been made far easier by the existence of a canal, which would have opened the way to Peru, where otherwise another fleet would have to be created on the Pacific by the attacking forces.

Lucien N. B. Wyse mentions this matter in his book Le Canal de Panama, published in 1886. He says that he examined the Spanish and Granadan archives, looking in vain for this decree supposed to have been issued by Philip II according to Alcedo. He thinks however that the confusion arose from a decree issued by Philip V in 1719, which threatened with capital punishment anyone who should dare to make any further investigations concerning the junction of the River Atrato with any stream flowing into the Pacific Ocean. This was done at the suggestion of the governor of New Granada in order to protect the custom-house at Carthagena against the activity of smugglers.

During this time England also, developing her naval power and advancing her schemes for colonization and trade, was not idle in the search for the secret of the Strait. Her sailors swept the seas in their attempts to find it. Towards the end of the sixteenth century expeditions under Frobisher and Davis tried to find their way through the northern part of the American continent and left the names of their commanders on our maps of the waters that they explored.

Lorenzo Ferrer Maldonado was another of those who claimed to have found a passage from sea to sea in 1588, the year of the Spanish Armada. While his account seems to have been discredited in his own time, it is stated by Navarrete that two hundred years later, towards the end of the eighteenth century, considerable attention was paid to his story and the Spanish government sent the corvettes *Descubierta* and *Atrevida* from Acapulco to investigate and report upon the Maldonado voyage.

The voyage of Juan de Fuca is reported by Purchas to have been made in 1592. He claimed to have sailed from Mexico up the coast of California in search of the reputed straits of Anian and the passage to the North Sea. When he arrived in latitude 47° N. he found a broad inlet between the 47th and 48th parallels which he entered and after sailing through it for twenty days, came into the Atlantic. Having thus in his opinion accomplished his purpose he returned to Acapulco. The only record of his voyage lies in the strait that bears his name, an appellation of later date than the supposed voyage.

The right worshipful merchants of the Moscovie and Turkie Company of England fitted out two vessels in 1602 under command of Captain George Weymouth to discover the northwest passage to China. For better success of the voyage this small fleet was provided with a great traveller and learned minister who had been in Persia and Turkey and was therefore familiar with the language and customs of the people whom the expedition was intended to visit. After sailing along the coast of Labrador for some time they returned to England without having accomplished anything. No better success attended the expedition of Master John Knight, who was sent out from England by a company of merchants in 1606, but returned to England after a fruitless voyage full of hardships and mishaps.

In reviewing the voyages made in search of the straits by the English, Purchas expressed himself as satisfied of its existence. The constant great tides in Hudson Bay every twelve hours and the increase of those tides whenever strong western winds blew, convinced him that the main Western Ocean was not far away. "So may all the world," he says, "be in this beholding to us in opening a new and large passage, both much nearer and safer and far more wholesome and temperate through the continent of Virginia and by Fretum Hudson, to all those rich countries bordering upon the South Sea in the East and West Indies."

Philip III (1598–1621) was also interested in finding the strait, and there is a letter from Pedro de Ledesma on behalf of the King to the President of the City of Panama, dated Dec. 31, 1616, concerning the necessary steps to be taken to examine the entrance supposed to exist by way of the River Darien to the South Sea. Upon the same date he also directed the fleet bound for Tierra Firme to make the same investigation.

In 1636 Francisco de Vergara, to whom Spain had granted the privilege of exploring the coast of California, transferred his right to Esteban Carbonel. The privilege was withdrawn, a suit was brought against Carbonel and he was arrested because of suspicious circumstances attending his proposed voyage. It was learned that he was a Frenchman and had French companions with him, some of them from New France, who said that a strait through the continent certainly existed. Carbonel had been building a very large boat secretly on the Río Santiago and it was thought that he planned to seek the strait, sail to France, and thus open to that country a passage to the Spanish possessions on the Pacific.

In 1640 Pedro Porter y Casanate presented a statement to the Spanish government concerning the advantages to Spain of a communication through California between the North and South Seas. He recited various voyages made in search of the strait and stated that after comparing most of the narratives, he found no bearing exact, no distance certain, no latitude established, no sounding dependable and no chart correct. These unfavorable comments upon the work of previous explorers are criticized by Navarrete, who thinks that they were made for the purpose of improving Porter's chances of being entrusted with an expedition himself. He was successful in this, but his expedition accomplished nothing.

In the early part of the 17th century Diego de Mercado, by birth a Fleming, but for a long time a resident of Guatemala, proposed to connect the oceans by a canal from Lake Nicaragua to the Gulf of Papagayo. Nothing came of this project, for while it was being examined and reports prepared concerning it, Mercado died.

Towards the end of the 17th century an act of the Scottish

Parliament was passed constituting the "Company of Scotland, Trading to Africa and the Indies." William Paterson, the chief projector of the Bank of England, was the moving spirit of this enterprise, which was popularly known as The Darien Company. An expedition was sent out from Leith in July, 1698. The opinion seems to prevail that the purpose of this company was to connect the Atlantic and Pacific oceans by a canal in order to facilitate the trade of Great Britain with the Orient. I have been unable to find a single expression of that purpose; on the contrary the purpose seems to have been to establish a colony on the Atlantic, then in course of time to establish another on the Pacific and to connect these two great emporiums by an overland route.

"The time and expense," wrote Paterson, "of navigation to China, Japan, the Spice Islands and the far greatest part of the East Indies will be lessened more than half, and the consumption of European commodities and manufactories will soon be more than doubled. Trade will increase trade, and money will beget money, and the trading world shall need no more to want work for their hands, but will rather want hands for their work. Thus, this door of the seas, and the key to the universe, with anything of a sort of reasonable management, will of course enable its proprietors to give laws to both oceans and to become arbitrators of the commercial world, without being liable to the fatigues, expenses and dangers, or contracting the guilt and blood, of Alexander and Cæsar."

Two Franciscan friars who explored the solitudes of New Mexico in 1777 suggested the possibility of connecting the headwaters of the Colorado River, which flows into the Gulf of California, with the headwaters of the Río Grande, which flows into the Gulf of Mexico. While the sources of these rivers may not be many miles apart, a glance at the map will suffice to show the utter impossibility of realizing such a dream.

An idea with some possibility of fulfilment was the plan advanced by the Biscayan pilot Goyeneche, who proposed to connect the Bay of Cupica with one of the branches of the Atrato.

A great many other attempts were made to find the secret of the straits, besides those here related, but sufficient account has been given of the continuous efforts made for several hundred years to find it.

From the Arctic Ocean to the Straits of Magellan no tempting stream that poured its waters into either ocean was neglected; no bay, no inlet failed to receive the careful examination of the explorer; no dream too wild but found its supporters—but all to no purpose. The fact remained that there was no open way from ocean to ocean, and that being established beyond doubt, former plans of a canal were revived and new ones advanced.

About one hundred years ago nine different locations for an inter-oceanic canal had been thought of, discussed, or examined, the number having been increased by five since the time of Gómara, two hundred and fifty years before. They are given by Humboldt in his *Political Essay on the Kingdom of New Spain* and copied in Thompson's translation of Alcedo's *Historical Dictionary* as follows:

- 1. By connecting the headwaters of the Columbia and Peace rivers in what is now the Dominion of Canada.
- 2. By connecting the headwaters of the Colorado River with the Río Grande.
- 3. By connecting the River Coatzacoalcos (Huasacualco) with the Gulf of Tehuantepec.
- 4. By way of the San Juan River to Lake Nicaragua, thence by cutting a canal to the Pacific Ocean.
 - 5. By way of the Chagres River to Panama.
- 6. The project of the Biscayan pilot Goyeneche to connect the Bay of Cupica with the River Naipi, a branch of the Atrato.
- 7. The development of the Canal de la Raspadura, which connects the Atrato with the River San Juan.
- 8. The Gulf of St. George on the Atlantic side of Patagonia was supposed to enter so far into the interior of the country as to communicate with some arm of the sea entering from the west.

Humboldt spoke also of a ninth point at which there might be a communication between the two seas by way of the Grand Para River in Brazil, but went on to say that "the height of the Cordillera and the nature of the ground, render the execution of a canal impossible."

In a later work he reduced the number of possibilities to five, namely:

The Isthmus of Tehuantepec

The Isthmus of Nicaragua

The Isthmus of Panama

The Isthmus of Darien, or Cupica

The Canal of Raspadura,

all placed at the center of the New Continent at an equal distance from Cape Horn and the northwest coast.

In speaking of the Isthmus of Panama he quoted the assertion of a traveller that the hills that compose the central chain of the isthmus are separated from each other by valleys "which leave a free course to the passage of waters." Humboldt therefore concluded that the research of engineers charged to explore those countries should be principally directed to the discovery of the transversal valleys. It is of interest to note that he said "I shall abstain from discussing the question whether this ground should form a separate republic by the name of Junxtiana, dependent on the federation of the United States."

J. P. Eckermann, in his "Conversations with Goethe," writes that while at table on February 21, 1827, Goethe spoke a great deal about Alexander von Humboldt, whose book relating to Cuba and Colombia he had begun to read. He seemed especially interested in the project of a canal through the Isthmus of Panama. "Humboldt" said Goethe "has indicated several other places. which, by using the rivers flowing into the Gulf of Mexico, could be of greater advantage for a canal than Panama. All this must be left for the future and for some great enterprising genius. much however is certain, if a canal could be built which would permit the passage of ships of all sizes from ocean to ocean, the entire world, both civilized and uncivilized, would reap countless benefits. But it would surprise me if the United States would miss the opportunity of getting such a work into their own hands. The westward tendency of this young nation will in the course of thirty or forty years have established it beyond the Rockies. New trading centers will spring up in the safe and roomy harbors on the Pacific coast for developing commercial relations with China and the East Indies. In that event it will not only be desirable

but also necessary that both merchant vessels and men of war should have a quicker connection between the Atlantic and Pacific than is possible by a voyage around Cape Horn. I therefore repeat that it is absolutely necessary for the United States to build the inter-oceanic canal and I am sure that she will do so.

"I would like to live to see this, but I will not, though it would be worth while to bear life for fifty years longer for this purpose."

During the first quarter of the nineteenth century the Spanish colonies on the mainland of North and South America declared themselves free and became independent states. Early in their separate political existence they turned their attention to the construction of an inter-oceanic canal. All the available routes were within their territory, but it was recognized that they would be unable either to construct or protect a canal without the help of some more powerful nation or nations.

In 1880 President Hayes expressed the opinion that the coast-line of the canal should be "considered a part of the coast-line of the United States" and that it should be under our control. Until that time the policy had been rather in favor of a canal open to the world upon condition of strict neutrality, and it is perhaps true that all other problems in regard to the canal would have been solved and its actual construction would have been completed long ago had it not been for difficulties and complications arising out of the questions of its status in international law.

Bolívar summoned a Congress of American Republics to meet at Panama in 1826, at which the question of the construction of a ship canal was to be one of the subjects of discussion. In his instructions to the U. S. Commissioners to that Congress concerning the diplomatic status of the canal, Mr. Clay said, "If the work should ever be executed so as to admit of the passage of sea vessels from ocean to ocean, the benefits of it ought not to be exclusively appropriated to any one nation, but should be extended to all parts of the globe upon the payment of a just compensation or reasonable tolls."

Owing to the delay in the appointment of the Commissioners they did not reach Panama until after the Congress had adjourned and it never again re-assembled.

In 1835 a resolution was adopted by the Senate of the United

States calling upon the President to open negotiations with the governments of other nations and especially those of Central America and New Granada for the protection of those who might undertake the construction of a canal across the Isthmus and for the purpose of securing forever the free and equal right of navigating such canal to all nations upon payment of reasonable tolls.

In 1839 the House of Representatives adopted a resolution requesting the President to consider the expediency of negotiating with other nations for the purpose of ascertaining the practicability of effecting a communication between the Atlantic and Pacific by the construction of a ship canal and for the free and equal right of navigating it to all nations. Neither of these resolutions obtained any practical result, but that of the House of Representatives seems to be the first suggestion of the construction of an inter-oceanic canal by the American government.

In 1845-46 Prince Louis Napoleon Bonaparte, while yet a po-

litical prisoner in France, secured a concession from the government of Nicaragua to organize a company for the construction of a canal by way of the San Juan River and the two lakes to Realejo, to be called "Le Canal Napoléon de Nicarague." his escape to London he published a pamphlet entitled Canal of Nicaragua or a Project for the Junction of the Atlantic and Pacific Oceans by means of a Canal. In this he said: -"There exists in the New World a state as admirably situated as Constantinople, and we must say up to this time as uselessly occupied. We allude to the state of Nicaragua. As Constantinople is the centre of the ancient world, so is the town of Leon the centre of the new, and if the tongue of land which separates its two lakes from the Pacific Ocean were cut through, she would command by virtue of her central position the entire coast of North and South America. The state of Nicaragua can become, better than Constantinople, the necessary route of the great commerce of the world, and is destined to attain an extraordinary degree of prosperity and grandeur. France, England and Holland have a great commercial interest in the establishment of a communication between the two oceans, but England has, more than the other powers, a political interest in the execution of this

project. England will see with pleasure, Central America becoming a powerful and flourishing state, which will establish a balance of power by creating in Spanish America a new centre of active enterprise, powerful enough to give rise to a feeling of nationality, and to prevent, by backing Mexico, any further encroachments from the North."

Later developments in France, which made Louis Napoleon Emperor of the French, ended his activities in this connection for the time. It has never been known how far his schemes had progressed, but it has been reported that the necessary funds were assured and the arrangements for commencing the work were in progress, and that it was the English operations in Central America in connection with the Napoleonic scheme which aroused the indignation of this country and eventually led to the Clayton-Bulwer negotiations.

In December, 1846, a treaty between the United States and New Granada was signed at Bogotá and ratified by both governments two years later. One of its articles guaranteed to 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 hereafter be constructed, shall be open and free to the government and citizens of the United States," for the transportation of all articles of lawful commerce upon the same terms as to the citizens of New Granada. In return the United States guaranteed to New Granada the perfect neutrality of the Isthmus and also "the rights of sovereignty and property which New Granada has and possesses over the said territory." No notice of the termination of this treaty was ever given by either party thereto.

The acquisition of California and the discovery of gold there made the subject of inter-oceanic communication of greater importance than ever to the United States. Overland routes by the Isthmus of Panama and across the Isthmus of Nicaragua were opened to take care of the large emigration to the Pacific Coast.

This led to the construction of the Panama Railroad. A contract was entered into by a party of Americans with the Government of New Granada for the exclusive privilege of constructing it across the Isthmus of Panama, and two ports, one on the Atlantic and the other on the Pacific, were to be free ports. A charter was

granted by the Legislature of the State of New York for the formation of a stock company under which one million dollars of stock was subscribed. The work was commenced in May 1850, and the last rail was laid at midnight on January 27, 1855, a locomotive passing from ocean to ocean on the following day. The construction account was not closed until January 1859, at which time the entire cost of the road was shown to have been \$8,000,000, and it was doing a profitable business. An interesting report concerning the road states that in 1860 only one-fifteenth of its freighting business was due to the California trade, the remaining fourteen-fifteenths consisting mainly of shipments between the United States and England, and Central and South America. A few years after the ratification of the treaty between the United States and New Granada, under which this road was built, negotiations between England and the United States culminated in the Clayton-Bulwer Treaty. It was signed at Washington, April 19, 1850, and ratifications were exchanged on July 4th of the same Secretary Blaine, speaking of it in 1881, described it as "misunderstandingly entered into, imperfectly comprehended, contradictorily interpreted, and mutually vexatious." It owed its origin to the fear of English aggression and was hastened by Great Britain's occupation, under assumption of a protectorate, of the territory at the mouth of the San Juan River. ports concerning the difficulties to be encountered in the construction of a canal across the Isthmus of Panama had led to a more careful consideration of the Nicaragua Canal, of which the San Juan River formed the Atlantic entrance. Representatives of the United States negotiated treaties with Nicaragua and Honduras, which, although never ratified, were used in persuading England to sign the Clayton-Bulwer Treaty. The English government was informed that while the United States "aimed at no exclusive privilege for themselves, they could never consent to see so important a communication fall under the exclusive control of any other great commercial power."

Article VIII of the treaty provides that "the governments of the United States and Great Britain having 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 practical communications, whether by canal or railway, across the isthmus which connects North and South America, and especially to the inter-oceanic communications should the same prove to be practicable, whether by canal or railway, which are now proposed to be established by the way of Tehuantepec or Panama."

Many insisted that by entering into this treaty the United States had abandoned the Monroe Doctrine, having yielded equal rights to a foreign country in regard to an American project. The treaty had hardly been ratified when misunderstandings arose concerning the construction to be placed on some of its stipulations, and several efforts were made towards its abrogation, but England remained tenacious of the acquired rights to a share in the protectorate over any canal that might be built. In 1860 President Buchanan in his annual message said: "The discordant constructions of the Clayton-Bulwer Treaty between the two governments, which at different periods of the discussion bore a threatening aspect, have resulted in a final settlement entirely satisfactory to this government," again indicating by this declaration that the United States made no claim to the sole control of the inter-oceanic canal, but rather favored the policy of having other nations join with them in guaranteeing its neutrality.

A few words ought here be said concerning the "Isthmus of Darien Ship Canal" which was strongly urged upon England by Dr. Edward Cullen in 1851, after he had crossed the Isthmus several times between Caledonia Bay and the Gulf of San Miguel, a distance of thirty-nine miles. By utilizing the Savana River, he claimed that the cut to be made would cross a country presenting but a single ridge of low elevation and would not exceed twenty-five miles in length. He said that "The canal, to be on a scale of grandeur commensurate with its important uses, should be cut sufficiently deep to allow the tide of the Pacific to flow right through it across to the Atlantic; so that ships bound from the Pacific to the Atlantic would pass with the flood and those from the Atlantic to the Pacific with the ebb tide of the latter." The cost of building the canal was estimated at £7,000,000 and "The Atlantic and Pacific Junction Company" was formed, its capital being fixed at £15,000,000. Dr. Cullen stated that the government of New Granada had conceded, by decree of Congress, Bogotá, June 1, 1852, the exclusive privilege of cutting a ship canal across the Isthmus of Darien and had granted 200,000 acres of land, besides those necessary for the canal and its works, to himself and his associates. It was expected that in accordance with the provisions of the Clayton-Bulwer Treaty, Great Britain and the United States would extend their joint protection to any company undertaking the construction of this canal. The Company was provisionally registered and was to be incorporated by royal charter or act of parliament, limiting the liability of the stockholders. The short account here given of Dr. Cullen's efforts in behalf of the Darien ship canal was obtained from a book published by him in London in 1853. Towards the end of that year the United States government sent Lieut, Isaac C. Strain to Caledonia Bay with a surveying party to examine the plan. reported it impracticable, as he found mountains from 1000 to 3500 feet high in the way of the canal, and with this the project of Dr. Cullen was abandoned.

In 1858 Louis Napoleon, now Emperor of the French, renewed his activities in connection with the canal project. A company was organized under his protection and an engineering party sent to Nicaragua after obtaining contracts both from Costa Rica and Nicaragua, but the enterprise collapsed for want of funds. Ten years later Napoleon again revived his project, but the outbreak of the Franco-German war ended further consideration of the matter.

After the close of the Civil War in the United States, our government again turned its attention to the inter-oceanic canal, and in 1866 the Senate passed a resolution requesting the Secretary of the Navy to furnish information concerning the various proposed lines for inter-oceanic canals and railroads. Rear-Admiral Davis in reply submitted a report giving the desired information and also set forth the insufficiency of available data. About the same time the United States began its efforts for the abrogation of the Clayton-Bulwer Treaty. Mr. Seward, writing to the American representative in London, made this statement:

— "At the time the treaty was concluded there was every prospect that work would not only soon be begun, but that it would be

carried to a successful conclusion. For reasons, however, which it is not necessary to specify, it never was even commenced, and at present there does not appear to be a likelihood of its being undertaken."

During President Grant's administration, thorough surveys were made of the various canal projects and considerable valuable information was obtained. Grant enunciated the doctrine of "an American canal under American control."

In 1879 a call was issued for a conference on the subject of an inter-oceanic canal at Paris, which resulted in the organization of a French construction company under the presidency of Ferdi-The name of De Lesseps was considered a nand de Lesseps. sufficient guarantee for the quick and successful construction of the canal and it stirred up considerable feeling in the United States. It was announced by President Hayes that "the policy of this country is a canal under American control." His successor, President Garfield, in his inaugural address expressed the same views, saying that 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 as will protect our national interests." The Secretary of State, Mr. Blaine, advised the American representatives in Europe that this policy was "nothing more than the pronounced adherence of the United States to principles long since enunciated by the highest authority of the government." England however maintained her position of reliance upon the terms of the Clayton-Bulwer Treaty and would consent to no modification.

About this time an entirely new idea was advanced by Captain James B. Eads, who had made a great reputation as an engineer by building a system of jetties at the mouth of the Mississippi River, deepening its entrance sufficiently for navigation. He proposed to build a railroad across the Isthmus of Tehuantepec which would carry the largest ships fully laden upon its cars from ocean to ocean. He secured a concession for its construction from the Mexican government but nothing ever came of it.

On February 1, 1881, the Universal Inter-oceanic Canal Company, which had been organized by De Lesseps, commenced its work. The Panama route had been decided upon and the plans for

a tide-level canal perfected. Its cost was estimated at \$132,000,000. From the beginning extravagance and corruption reigned supreme. All kinds of merchandise, necessary and unnecessary, were purchased at enormous prices. Willis Fletcher Johnson, in his book, Four Centuries of the Panama Canal, says: "In one place I saw where there had been stored a huge consignment of snowshovels, — thousands of them. In another place there had been received and stored some 15,000 kerosene torches, such as are used in torchlight processions. The manufacturers got rid of surplus, out-of-date and almost worthless stock, at top prices. The purchasing agents got large commissions." The same extravagance prevailed in the construction department. Writing in October, 1885, Wyse says that of the sixteen or seventeen millions of cubic metres excavated, but twelve millions were properly done upon the canal itself. Then there is an account of millions spent upon hospitals, stables, office buildings, roads, etc., which cost the stockholders three times as much as they did the builders. There could be but one result. After seven years, in 1888, the company had spent \$400,000,000, not half of the work had been done, and the company was bankrupt.

On October 21, 1893, the New Panama Canal Company was organized. It expected to complete the canal by an additional

expenditure of \$180,000,000, and the work proceeded.

Meanwhile the United States had kept a jealous eye upon the proceedings at Panama. During President Arthur's administration, Secretary Frelinghuysen had negotiated a treaty with Nicaragua for the construction of a canal through her territory. This treaty was still before the Senate when President Cleveland came into office and withdrew it. In his message to Congress on December 8, 1885, he said: "Whatever highway may be constructed across the barrier dividing the two great maritime areas of the world, must be for the world's benefit, a trust for mankind, to be removed from the chance of domination by any single power, nor become a point of invitation for hostilities or a prize for war-like ambition." This was a distinct reaffirmation of the Clayton-Bulwer Treaty, which his predecessors had endeavored to abrogate.

In 1890 the Maritime Canal Company, an American corporation,

began work at Greytown. After three years they had spent their entire capital of \$6,000,000, and owing to the panic of 1893 in the United States, no further money could be raised for it, in spite of the fact that the Nicaragua route seems always to have been the popular one in this country. An effort was made to have the United States government take up the project, and the matter was still pending when war broke out between Spain and the United States in 1898. Then came the spectacular voyage of the Oregon from San Francisco to the West Indies. An interoceanic canal had now become a public demand and the United States must build it. In 1899 the President was authorized to send a commission to investigate both the Panama and Nicaragua This commission made its report in December 1900. stating that while the cost of the canal at Panama would be less. the Colombian government "is not free to grant the necessary rights to the United States, except upon condition that an agreement be reached with the New Panama Canal Company. commission believes that such agreement is impracticable." The report further stated that in its opinion "the most practicable and feasible route for an isthmian canal to be under the control, management and ownership of the United States is that known as the Nicaragua route."

Hardly had this report been made, when the commission began its negotiations with the French Company at Panama, which had estimated the value of its property at \$109,000,000, while the commission thought that the United States should not pay more than \$40,000,000 for it. The French Company finally offered its property at that price in January 1902, and the commission promptly reversed its recommendation and urged the adoption of the Panama route.

Happily also the Clayton-Bulwer Treaty was superseded by the Hay-Pauncefote Treaty, which was ratified by the United States Senate on December 16, 1901, thus ending a long controversy. It granted to the United States the right to construct the canal and also "the exclusive right of providing for the regulation and management of the canal."

In June, 1902, the so-called Spooner Bill was approved, and President Roosevelt was authorized to purchase the rights of the French Company and to proceed with the work at Panama, under certain conditions to be granted by Colombia. Should he be unable to obtain the control and the rights desired from Colombia, he was authorized after negotiating treaties with Costa Rica and Nicaragua upon terms that he might consider reasonable, for the construction, perpetual maintenance, operation and protection of a canal," to proceed with the construction of the Nicaragua Canal.

Then came the vexatious negotiations with Colombia, which finally resulted in the establishment of the Republic of Panama, with which the United States proceeded to make satisfactory

treaties concerning the canal.

The story of its construction must be an interesting one, but it is entirely separate and apart from its historical development, which I have endeavored to present to you. We are here to-day to celebrate its completion, and it will be one of the most interesting studies of the years to come to watch its effect upon the trade of the entire world. What will be the effect of the closer relations of Europe with the lands of the Pacific, and what effect will they in turn have upon Europe? We can only hope that the same general benefit to mankind which has always resulted from bringing together more closely the peoples of the world, will also prove true in this instance, where they have been brought closer together by the Panama Canal.

The Chairman: Ladies and Gentlemen of the Panama Pacific Historical Congress: When the idea of this Congress was first started, it was speedily agreed upon by the members having charge of the programme, that there should be a series of papers on the history of the Pacific Ocean, culminating in a paper upon the history of the Panama Canal Idea. That paper, as written by Mr. Rudolph J. Taussig, you have just heard, and that paper will be published in the memorial volume of this historical Congress; but it is to me the culminating point of this Congress that I should be able to call upon, in succession to the reader of the paper on the "Historical Sketch of the Canal Idea," the man who removed it from the realm of ideas.

I present to you Mr. Theodore Roosevelt, a former president of the American Historical Association.







