Do you think there is any one in these parts that can do it?

Let them try it.

"Then," Baldwin said, "I want you to go to Frijoles Station, get in a row with the track master, give him a rough beating and kick him out. You can then have his job." The offer was at once accepted.

On the following morning the new arrival found himself at Frijoles, and met the by-no-means courteous and refined charge d'affaires. The latter was ready to pick a quarrel with the newcomer, and soon both got warm and agreed to fight it out in accordance with the rules of the ring. They staked off the ring, and dispensing with the seconds went at it. After several rounds in which both showed signs of heavy punishment, the stranger gained the victory and expelled his antagonist from the place.

This occurrence is perfectly true and illustrates some of the rough and ready events of those times on the Panama Railroad. As an afterword we might add that the hero of this affair was Tom Sharp who later fought his way to success in the railroad world.

From start to finish the company was beset with labor troubles. The laborers that were brought to the Isthmus under contract would melt away in the stream of people bound for the California gold-fields. In February 1851, the work was brought to a stop by a wholesale desertion of these men, but with the assistance of the Colombian authorities a large number were apprehended and kept in jail until they signified their readiness to return to work. Another factor in the labor question was the Isthmian fevers which at times made severe inroads on the men and gave rise to the report that "The Panama Railroad cost a man for every tie."

WITHOUT "PA-NOR-MA."

Why are all that live outside the city like orphans? Because they are without Pa-nor-ma.
The Black Swamp.

Probably the largest obstacle met with in the construction work of the road was the stretch through the swamps between Colon and Gatun, and particularly over the famous "Black Swamp". This swamp is located between Lion Hill and Ahorca Lagarto and has been giving trouble at intervals ever since the opening of the road. The constructors dumped thousands of tons of rock, wood and other material into the swamp before a foundation was secured firm enough to be used for the passage of trains. During the period of the French canal companies train service was frequently interrupted at this point and on each occasion tons of machinery and scrap were dumped into the place. The Isthmian Canal Commission has twice experienced trouble during the past year from the "bottom falling out" in this locality. The last occurrence was in September, 1907, when sixty feet of track sank out of sight soon after a passenger train had passed. The Commission has adopted the method of driving piles as a support to the track and where this has been done no further trouble has resulted. It is the intention however, to build a "gauntlet" track around the spot to avoid a recurrence of this nature.

First Train Into Panama.

The company had trains running from Aspinwall to Gatun in 1852, and to Barbacoas bridge in 1853. On January 28, 1855 the first train reached Panama and the Star & Herald two days later writes of the event as follows:

"The whistle of the railroad engine has at length woke up the slumbering echoes of Panama, away through the hills and dales, over the quiet bay and amidst the ruins of the ancient city, the first wild shriek has gone forth proclaiming the advance of commerce and civilization on the Pacific coast of South America. The great connecting
link of the Atlantic and Pacific is completed, the Panama Railroad is finished, and the first train has made its appearance amongst us, opening up a new era of prosperity for the people of the Isthmus of Panama.".

"On Sunday afternoon about half past three o'clock thousands of people gathered along the line to witness for the first time the appearance of the iron horse as it rattled over the tracks to the station, and many were the expressions of surprise and wonder at its appearance, and the facility with which the wild creature was managed. Mules and pack saddles are now forever supplanted by the steam engine, and the mud of the Cruces trail is exchanged for a comfortable seat in a railroad coach. The twenty-five cents per pound charged for transporting freight across the Isthmus is now reduced to a mere nominal cost, and the long tedious journey over the Isthmus has been transformed into a pleasure trip of a couple of hours".
Shipping Bananas from Bohio—Panama.

"What will follow the opening of the railroad it is hard to foretell, but we can see great things looming up in the distance for Panama. Doubtless there are those that will suffer a temporary loss in their business by the opening of the railroad, but this must be expected as a natural consequence and will be of short duration. Far away to the confines of the Pacific the opening of the Panama Railroad will be hailed with delight. From north to south; from east to west of this mighty ocean will its beneficent influences be felt. From Cape Horn to Oregon, from Kamschatka to Japan, the Panama Railroad will tend toward commercial development. Australia and all the isles of the sea are brought by it into immediate contact with the old world, and the colonies will now look upon Panama as a bridge over which the traffic with their mother country must pass".

"But what British money and French ingenuity could not accomplish in upwards of a quarter of a century, Yankee enterprise has undertaken and carried through in five years, and has given to the world an enduring monument of what a few determined spirits of the United States can do".

"The names of William H. Aspinwall and his associates who headed this great scheme of Col. Totten, and those who with him carried out the work, are worthy to be immortalized, and it is to be hoped that such men may long be spared to witness the benefits which they have conferred on the world by their indefatigable zest and unflinching determination in building the Panama Railroad".

In November, 1866 the Legislative Assembly of Panama adopted a resolution honoring the builders of the railroad, and authorized the placing of a portrait of each in the reception room of the government palace in Panama, the expense thereof to be paid out of the public treasury.
With the opening of the road, a heavy traffic soon developed, which with the extremely high rates charged for passenger and freight hauls, made large profits for the stockholders. After a time these excessive charges became the subject of complaints which came to the notice of the Colombian Government. A head tax on each passenger carried over the road was thereupon ordered, and in addition a large number of government employees, politicians and influential citizens were instructed to be placed on the free list. This resulted in an exchange of notes between the American Minister resident at Bogota, and the Colombian Government, and a compromise was finally effected by which the head tax was to be removed upon the railroad company inaugurating a lower passenger tariff. The steamship combinations constituting in effect a monopoly were not changed until after the purchase of the road by the United States Government.

Panama Not What it Used To Be.

That the railroad would benefit the Isthmus was not immediately apparent. Six months after the opening of traffic the Star & Herald prints the following article signed "Traveler":

"Panama is not what it used to be; it is not the Panama of 1849-54. Then the California travel afforded a large business to the storekeepers, muleteers, transportation agents, hotels, bankers, baggage smashers, gamblers and thieves. The completion of the Panama Railroad enables passengers and freight to pass through from California without delay. Now all is changed. The grass grows in the streets and on the Plaza, where once busy crowds thronged. A large number of business houses have broken up or changed to a more prosperous location. It looks to me more like a deserted graveyard than the Panama of old. It is quite clear that the railroad has not benefited the Isthmus, but rather the reverse".
Railroad Concession Extended.

With the extension of time given by the Colombian Government in 1867, an agreement was entered into whereby the railroad company consented to extend its line to one of the islands in the harbor, or to a point where the wharves could be reached at all times by large sea-going vessels. The company took no steps to commence this work and in 1877 the matter was made the subject of considerable correspondence between it and the Colombian Government. The railroad company took the stand that the agreement could be complied with at any time during the years of extension, while the Bogota authorities maintained that it meant from the date of the extension. The point however was lost sight of, or allowed to pass in the more important canal negotiations that came up about this time.

Investigating Traffic Complaints.

The traffic arrangement formerly in vogue between the Panama Railroad Steamship Company, and the Pacific Mail Steamship Company whereby the latter had the exclusive privilege of issuing through bills of lading on freight from San Francisco to New York became the
subject of official action in 1905, and on June 12th of that year the contract with P.M.S.S.Co. was abolished. Previous to this it was the practice of the Panama Railroad Company to recognize no through bills of lading except those issued from its own office in New York. Thus goods brought to the Isthmus by competing steamship lines were subjected to the current local freight rates in shipping across. Complaints regarding this situation became so numerous that in 1905 Joseph W. Bristow was commissioned to investigate the entire matter, which he did by visiting the Isthmus and going over the route to San Francisco. His report which followed contained many important recommendations among them being:

- Cancellation of the existing exclusive contracts with the Pacific Mail S. S. Co., and the Pacific Steam Navigation Company.
- Continued maintenance of the Panama Railroad Steamship line by the United States Government.
- Establishment by the Government of a line between ports on the Gulf and Colon in case private capital refused to take it up.
- Establishment by the Government of a line between Panama and San Francisco, in case the Pacific Mail Steamship Co. decided to discontinue its service, and no other company entered the field.
- Double-tracking the Panama Railroad.

The contracts with the other steamship companies were cancelled June 12, 1905.

The Panama Railroad Steamship Company is still being maintained by the Government as a part of the operations of the Panama Railroad Company. It possesses five steamers, viz., the Panama, Colon, Advance, Finance and Allianca. The last named was in dry dock during the last half of 1907, and has been enlarged to a boat of the Panama class.

The maintenance of weekly sailings by the United Fruit Company from New Orleans to Colon furnishes a better service than formerly, and covers in part the third
Investigating Traffic Complaints.

recommendation mentioned above. The boats cover the distance of 1400 miles in five days, but the passenger accommodations are limited.

The Pacific Mail Steamship Company at the present time is again the subject of official investigation. Charges are reported to have been made by the Panama Railroad Company and the Isthmian Canal Commission that the Pacific Mail S.S.Co. has been rendering inadequate and unsatisfactory service between Panama and San Francisco, thus proving an injury to business. Mr. Bristow has once more been selected to investigate the situation and make a report, which will be ready early in 1908.

The double-tracking of the Panama Railroad is practically an accomplished fact. At the Panama end the double track begins at the La Boca “Y”, about one-half mile from the city passenger station and continues to Pedro Miguel. From here to Culebra but one track is used. From Culebra to Gatun there is an uninterrupted stretch of double-track. From Gatun to Mount Hope but one track will be used, and from Mount Hope to Cristobal there is a network of tracks, comprising the Cristobal yards.

The New Main Line.

Work on the new main line of the Panama Railroad, as it will be when the canal is completed was begun in June, 1907. The new line was made necessary on account of the low level of the old track, a great part of which will be submerged when the Gatun lake is filled. By the end of October, 1907, over three and one-half miles of this new track had been laid. One of the largest railroad embankments in the world, and probably the largest in point of average height to length, will be located at Gatun on the new line. It crosses the valley of the Gatuncillo river at an average height of about eighty-two feet, is one and a quarter miles long, and will contain over 2,600,000
HOTEL KENMORE
CENTRAL AVENUE, FRONTING ANCON BOULEVARD.

BACHELOR QUARTERS.
STRICLY FIRST CLASS AMERICAN RESTAURANT
FOR LADIES AND GENTLEMEN.

MEALS, TABLE D'HOTE: $1.50 SILVER.
A la Carte Service at All Hours of the Day or Night.
Steaks, Chops, Oysters, Chicken, Squabs, Lobsters, Game, and
EVERYTHING IN SEASON.

SPECIAL RATES TO PERMANENT GUESTS.
WE NEVER CLOSE.

C. S. BUTTRICK, Proprietor.

cubic yards of material. Owing to the great height and
length of this fill it will be necessary to build it in three
sections. A trestle, thirty feet high and running the entire
length of the fill, will first be built, from which material
will be dumped by the construction trains. When the
dirt reaches the top of the trestle another 30-foot trestle
will be built on the dump thus formed, and the operation
will be repeated until the final grade of the railroad is
reached. The fill crosses an arm of the lake that will be
formed by the Gatun dam and an opening will be left at
the bottom of the fill in case it ever becomes necessary to
drain the lake. In order to allow passage for boats a
drawbridge of the Bascule type, about 100 feet long, is
being considered.

The new bridge over the Chagres river near Gamboa,
will be 1,320 feet long, consisting of fourteen 80-foot
through-girder spans and one 200-foot through-truss span.
The contract for the steel work has been let to the Penn
Bridge Company and will cost $60,000. The fifteen spans will rest on fourteen piers and two abutments all of which will be built of concrete on pile foundations. It is estimated that the masonry work will be finished about July, 1908.

There will be a tunnel at Miraflores, the first on the Isthmus, about 600 feet long. It will be a single track tunnel and will be lined its entire length with concrete.

It is estimated that before the new line is completed 10,000,000 cubic yards of fill must be made. All these fills are being made with excavated material from the canal cuttings.

Plans have been prepared for a modern terminal yard at Panama of nine tracks, The terminal at Colon has already been brought up to date. A new $50,000 modern passenger station is all that Panama now lacks in the matter of railroad facilities.

Some Comparisons as to Rates.

It is interesting to note the difference between the first passenger and freight tariff of the Panama Railroad which went into effect February 15th, 1855, and that of the present day. The following table will give some idea of the changes that have taken place:

<table>
<thead>
<tr>
<th></th>
<th>1855</th>
<th>1903</th>
<th>1907</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fare Panama to Colon, 1st. class</td>
<td>$2.50</td>
<td>$5.00</td>
<td>$2.40</td>
</tr>
<tr>
<td>Fare Panama to Colon, 2d. class</td>
<td>Not quoted</td>
<td>2.25</td>
<td>1.45</td>
</tr>
<tr>
<td>Charge for baggage, .10 per lb.</td>
<td>.02 per lb.</td>
<td>.02 per lb.</td>
<td>.02 per lb.</td>
</tr>
<tr>
<td>Freight Rate, 1st. class, 3.00 per cwt.</td>
<td>.40 per cu. ft.</td>
<td>.50 per cwt.</td>
<td></td>
</tr>
<tr>
<td>Freight Rate, 2d. class, 2.00 per cwt.</td>
<td>1.20 per cwt.</td>
<td>.44 per cwt.</td>
<td></td>
</tr>
<tr>
<td>Freight Rate, 3d. class, 1.00 per cwt.</td>
<td>.80 per cwt.</td>
<td>.32 per cwt.</td>
<td></td>
</tr>
</tbody>
</table>

All the rates mentioned in the above table were payable in gold. While the fare from Colon to Panama was at the rate of over 50 cents gold per mile, in those days it was not considered excessive, in fact, travelers
congratulated themselves upon getting over the Isthmus so easily and cheaply. Children under twelve years of age were charged half fare, or $12.50, while the rate to residents on the Isthmus was commuted to a flat amount of $50.00 per month. A large number of articles at that time did not come under the general classification, and carried special rates. One quarter of one per cent. of its value was charged for the transportation of gold across the Isthmus. Silver was charged one-half of one per cent.; jewelry and precious stones one-quarter of one per cent.; indigo and cochineal, 2 cents per pound; coffee and cocoa 1 cent per pound; coal in bulk $9.00 per ton of 2240 pounds; coal in bags $7.00 per ton of 2240 pounds, iron in pigs $7.50 per ton; rolled iron $10.00 per ton; white pine lumber $18.00 per thousand feet; yellow pine lumber $20.00 per thousand feet, and oak at $22.00 per thousand feet. Horses, mules and cattle were transported at owners' risk. The rate on horses was $40.00 each, mules $20.00, and cattle $7.00. All bills for freight had to be paid in advance, but the management in its first schedule made the consoling announcement that as soon as the business of the road would warrant, some of the above rates might be materially reduced.

The baggage charge was a feature the traveling public did not like, especially inasmuch as the management rated overcoats, umbrellas and the like under this head. So much "kicking" resulted that about three months after the first rates were put into effect, the company permitted passengers fifty pounds of baggage free.

The first-class passenger rate between Colon and Panama at the time the United States took the railroad over was $5.00 gold. On the first of August, 1904, the rate was reduced to $4.00. Later it came down to $2.80, and again to $2.40 where it stands at the present time.

Passenger traffic over the railroad during the past year or so has shown an enormous increase. This is in part due to the constant accessions in the ranks of the
The I.C.C. Sanitarium at Saboga Island -- Panama.
Commission employs on the Isthmus, and in part to the great liberality with which these were formerly treated in the matter of passes. Inasmuch as the Isthmian Canal Commission pays to the Panama Railroad Company a certain sum monthly (said to be $3,000 at the present time) for passenger transportation, the increase or decrease of such sum being dependent upon the amount of travel, it behooved the former to curtail these privileges to some extent. Notwithstanding, gold employees are allowed a courtesy pass once a month, while the privilege of half rates is extended to all classes of employees and their families at any time.

Most of the freight is now hauled across the Isthmus at night. The completion of the Tehuantepec Railway does not appear to have had any appreciable effect on the trans-Isthmian business to date, while the local business is constantly increasing in volume. The freight traffic is generally heaviest during the months of January and
February when the coffee crops of Ecuador and Central America are moving.

Some Railroad Earnings.

The railroad paid dividends on its capital stock every year from 1853 to 1892. The smallest dividend during this entire period was two per cent, in 1885, and the largest 44 per cent. in 1868. In 1865 the capital stock was increased from $5,000,000 to $7,000,000. In 1881,
the last year that the railroad was owned by American capitalists, a dividend of 52 1/2 per cent. was declared. This however, not only represented the earnings of that year, but included the assets on hand at the time the road was sold to the French canal company. The average annual dividend paid from earnings of the company from 1853 to 1881, was a fraction less than five per cent. The road had always been a financial success, and while under the control of the American stockholders, exceedingly profitable.

The original cost of the Panama Railroad was a little over $8,000,000. During the first ten years of its operation it transported over $700,000,000 worth of specie and 300,000 bags of mail, and it is said that not a dollar of the specie nor a bag of mail was ever lost during this period.

**Future of the Railroad.**

In the investigation of the Panama Railroad Company made by a committee of the United States House of Representatives in 1905, the following question was asked by Mr. John J. Esch, Representative from Wisconsin:--

When the canal is finally completed, the railway line will be devoted almost wholly to local traffic, will it not?

Mr. William Nelson Cromwell, the railroad's counsel, then under examination, replied:—

"That is a very interesting question Mr. Esch, and one upon which traffic men differ .... I do not share the opinion that the Panama Railroad will become valueless at that time. No man can judge what will be the conditions ten years hence, with the new traffic element (the canal) as a practical thing before it—not a theory as to-day. The railroad will probably then be operated by electric power generated .............. at one of the ................. great water-power points. Electricity will be inexpensively produced on the line of the canal by water-power, and the railroad may
be operated in that way, thus greatly reducing the cost of operation. At that time too, we will have paid off the first mortgage out of earnings and our fixed charge will thus be reduced; the local business will be active, and Panama and Colon will be far more important than they are to-day. Nearly every passenger approaching the canal by steamer will disembark at one or the other termini, and taking the quiet railroad transit across the Isthmus, will visit the cities and observe the interesting sights during the day, while the steamer is passing through the canal. The steamer will enter the canal at sunrise at Colon, say, and will make its exit at Panama at sunset, and the passenger in the meantime will have passed over the electric railroad and be amusing himself in either city while the steamer is moving through the canal. The local traffic will have grown to importance; the country will have developed, and business will have sprung up along the line of road, thereby furnishing local traffic."

Dock Facilities.

At Colon, the Panama Railroad Company has three wooden wharves, and one fine new dock completed in 1906 (Dock 11), at which all of its steamers now land. There are two other wharves at this point, one owned by the Royal Mail Steamship Co., and the other, now out of repair, by the Pacific Mail S. S. Co. The port and terminal at La Boca was completed and opened to commerce on

---

**TUNG ON TAI & Co.**

No. 23 Front Street. Colon, Republic of Panama.

**Splendid Line of Chinese and Japanese Silks.**

Tourists and visitors in the Isthmus are cordially invited to inspect our Goods.

We also invite attention to

Our Complete Stock of Fine Liquors.
January 1, 1901, at a cost of $2,148,303. This included the steel pier which cost the major portion of this sum. The pier is 960 feet long, and the depth of water alongside is 26 feet at low tide. In 1905 it was found necessary to make a considerable extension for the unloading of lumber and heavy materials destined for the Isthmian Canal Commission. The pier is equipped with electric cranes and other apparatus for rapid unloading, while the wooden lumber dock was so built that it enables the unloading of as much as 200,000 feet of lumber in a single day.

NIGHT OF HORROR IN APRIL '56.

When the Panama Railroad was opened in 1855, it threw the men engaged in the pack-train business out of a job. At that time the criminal element formed a considerable constituent of the population, their number being augmented by the idle pack-train men, who finding nothing profitable to do turned to ways dark and devious. In addition, many were openly antagonistic to the railroad which had taken from them their means of livelihood. All of this led up to the occurrences herein related. It should be understood that the better class of private citizens had no part in the affair, although the authorities were charged with woful laxity. Afterwards, the best people of the town took the initiative and helped rid it of the lawless element.
—Editor.

A fearful night in Panama was that of the 15th of April, 1856. The vesper bells had just sounded from the towers of the Cathedral, but instead of the usual Ave
Maria, the calm of that moonlight evening was broken by distant cries and the noise of many feet rushing through the streets. The church bells outside the walls tolled the signal of fire, but unconsciously they rang an alarm of a more terrible nature than that, an alarm that spelled robbery and murder and sent more than a dozen to an unknown grave.

Shouts of "To the Cienaga," were heard on every hand, and the rush concentrated itself in that direction. The Cienaga was a district of the town, then outside the city proper, where were located the passenger station, offices, and wharf of the Panama Railroad Company. The same buildings are standing to-day, practically intact, and are now known as the old passenger station, and the American Wharf. In 1856 there was a cluster of cheap hotels and eating houses in the vicinity of this station. These have since disappeared.

On the afternoon of April 15th, 970 passengers arrived at Panama from New York, bound for the California gold fields. They had expected to embark immediately on the steamer John L. Stephens, but the tide being out, they were detained on shore. Some of the passengers were gathered about the station waiting to get their tickets registered, while others went to the hotels and eating houses. Shortly after six o'clock one of the passengers said to have been under the influence of liquor, became involved in an altercation with a negro fruit vendor over the settlement for a piece of watermelon. The negro made a hostile demonstration with a knife, whereupon the passenger drew his revolver and fired. A commotion immediately ensued. The passenger sought refuge in the Ocean Hotel, along with some of his companions.

Here the crowd assembled, and inside of fifteen minutes an attack was made on the Ocean Hotel, McAllister's store, and the Pacific House, the latter situated to the left of the railroad depot. Capt. McLane, agent of the Pacific Mail Steamship Company, and Mr. William
Birds eye view of Culebra and vicinity—Panama.
Sombrerera de M. ENDARA.
Calle 69. Número 69, Frente á Modura-Lupi Co.,
PANAMA.
ESMER Y PUNTUALIDAD EN EL TRABAJO.
Especialista en venta de Sombreros de Panamá.

ENDARA, The Hatter.
No. 69, Ninth St., Front of Modura-Lupi Co.
PANAMA.
MY WORK IS STRICTLY FIRST CLASS.
ALL ORDERS GIVEN PROMPT ATTENTION.
IF YOU are Thinking of Buying a PANAMA HAT
SEE ME FIRST. I AM A SPECIALIST IN THIS LINE.

Nelson of the railroad company were not far away when the outbreak occurred, and quickly sent for Col. Garrido, and the police. Meanwhile some of the passengers had started down to the wharf to embark, while others clamored for guns and ammunition to go to the rescue of the women and children in the hotels. All the arms in the railroad office at the time consisted of a double-barreled gun, brace of pistols, a sabre and fourteen old flintlock muskets. After some delay these guns were given out and loaded for defence, but a sentry was stationed at the door to prevent any from going out and joining in the fight. While this was going on, Mr. Center, another official of the railroad, succeeded in getting the women and children removed from the Ocean Hotel.

Col. Ward, the American consul, and Mr. Sabla, his secretary, arrived on the scene at this juncture, and endeavoured with other cooler heads to restrain the male passengers from mixing in the fray. An old cannon belonging to the railroad company was dug out of the sand and loaded with rivets, but Col. Ward and Mr. Center gave positive orders that it was not to be fired unless an advance was made by the mob. The consul then sent his secretary to see if the police were coming, but as he did not return, (having been shot in the leg), the consul and Mr. Nelson went forward to see how matters stood. They had not advanced beyond the Pacific House when a crowd of natives came from among the cane huts. Mr.
Nelson called to them not to fire, but they disregarded the order and let off a number of shots, some of which hit Col. Ward's horse. Mr. Nelson expostulated with the people, but they told him to keep out of the way and not to go back to the station, unless he wanted to be killed. Mr. Nelson persisted in his course toward the station and finally reached there in safety.

In the meantime most of the passengers and persons at the station had got inside the company's fence and sheltered themselves as well as possible from the bullets that now flew thick and fast. The mob had maintained a regular fire on the building, killing several and wounding others. A report was then spread that the natives were changing their positions and everyone felt a little easier, believing that when Col. Garrido arrived with the police, the affair would be speedily terminated. Soon after the bugle of the police was heard, but instead of charging on the rioters, they joined issue with them, and commenced firing on the depot. By this time the natives had reached the freight house and were busy pillaging it.

Col. Ward, with some of the others then returned to town for the purpose of inducing the Governor to come and stop the massacre. On their way up they were halted by a party of armed natives, but were finally permitted to proceed. Arriving at the Governor's house, they found him away, but there was a crowd of men about the place carrying guns and demanding powder and ball. After some further search, the Governor was located in another street. He agreed to accompany the American party back to the station, but stated he had already been there, and got a bullet through his hat.

Reaching the scene of the trouble once more, they found the natives still plundering the Ocean Hotel, and McAllister's store, while a man on the beach had a cannon loaded and pointed at the steamer Taboga lying nearby. It was with some difficulty that he was induced not to fire. Here too they learned that Col. Garrido of the
police had gone on board the Tahoga, disarmed the passengers and removed the ship's gun.

While the other officials were absent on the above errand, Mr. Center, who had remained behind, started to take a look about the depot. He found the freight room filled with men, women and children, all trying to screen themselves from the firing, then very brisk, and in a state of the wildest excitement. From here he entered the office where he found a group of men trying to keep the outer door closed. He proceeded to assist them, and while doing so saw a man killed before his eyes. On the floor of the office lay four or five of the dead and wounded.

Leaving the scene of the slaughter he next managed to get a plank over the beams of the freight door, and looking out upon the Cienaga, he distinctly saw the police outside the depot firing deliberately into it, Col. Garrido with his sword drawn cheering and urging them on. Proceeding from here to one of the rooms in the upper story
of the station, Mr. Center discovered two of the passengers trying to hold a door shut. Even as he approached them, they were both shot, one dying instantly and the other in a few hours. The natives finally forced a passage into the freight room, and commenced to rifle and plunder carpet bags, and trunks, while the frightened passengers congregated here, cried for mercy.
When Mr. Nelson and Capt. McLane reached the station after leaving the Governor, they found the police outside in a very excited state. They claimed they had been fired upon from the upper story of the depot, and were desirous of retaliating in the same manner. Upon Capt. McLane promising investigation, Col. Garrido ordered further demonstrations upon the part of the police to cease, and together they went to the room upstairs in the depot from which the shots were alleged to have come. This room they found filled with women and children, the few men there declaring they had never fired a shot.

About this time the authorities had obtained the ascendancy over the mob, and as soon as possible the remaining women and children were conveyed on board the steamer. Some of the passengers had taken to the bushes in the outskirts of town, and a search party was sent out to round them up. One was met who said he had been robbed by men calling themselves policemen.
An examination of the railroad office after the riot, revealed a terrible sight. The dead and wounded lay about the floor, some of the former horribly mutilated. All the books, papers and furniture of the company were destroyed. An attempt had been made to break open the large iron safe, a hole having actually been made through the exterior plate. Outside, some of the cars had been damaged, rails taken up, and the telegraph wires cut. The attempt to fire the depot providentially failed. The streets approaching the station were strewn with cut open trunks, and discarded material from the sacked buildings.

The lives of sixteen Americans are known to have been lost in the riot, all but two, passengers of the steamer Illinois from New York. Of these, only four or five were identified. The wounded numbered about fifty. Among the victims of the tragedy was Nathan Preble, a descendant of Commodore Preble, the noted American naval officer. (1)

The U. S. Ship, St. Mary, arrived in Panama Bay on the 23d, following the occurrence, and the "Panama Star & Herald" of April 29th, 1856, contains the following correspondence between its commander, Capt. T. Bailey, and the Governor of Panama, with reference to the affair:

"U. S. Ship, St. Mary, Harbor of Panama, April 23d, 1856.

His Excellency, Don F. de Fabrega, Governor of Panama.

Sir:—

On the 15th inst., several citizens of the United States, France, and Great Britain were massacred; others were serious—

(1). The occurrences herein related are based upon depositions made by Mr. Center and Mr. Wm. Nelson of the Panama Railroad Company, and statement made by Capt. McLane of P. M. S. S. Co., published in the Star & Herald of April 19th, 1856.—Editor.
Entrance to Ascon Hospital—Panama.

(Author's name and affiliation are not visible in the image.)
ly wounded and outraged, and a large amount of American property was plundered by the police and inhabitants of Panama and vicinity.

These outrages, robberies and murders were for the most part committed upon innocent and unarmed men, women and children, who were peacefully endeavoring to pass this great highway of nations. It is my chief duty to employ force under my command for the prompt protection of the lives and property of American citizens. An early explanation therefore, of the cause of this catastrophe, as well as some evidence of your Excellency’s inclination and ability to prevent such occurrences, is desired by me in determining the necessity of my immediate interference for the protection of the persons and property of the citizens of the United States, until specific orders from my Government shall be received.

I am Sir,

Your Obedient Servant,

T. Bailey,
Commander, U.S.N.

The Governor replied in a lengthy statement reciting the origin of the affair, setting forth that he had sufficient force at his disposal to prevent a repetition of such occurrences, and enclosing depositions from José Manuel Luna who was concerned in the row with the American, and two from natives of the United States, one T. B. Williams, 33 years old, a native of Georgia and an employee of the railroad company, who gave testimony against the passengers.

The statement evidently did not afford satisfaction to the American officer for two days later, on the 25th of April, a second representation was made to the Governor, as follows:

"Sir:—I have the honor to acknowledge receipt of your replies to my communications of the 23d. and 24th inst. Apart from the announcement of the restoration to the owners, of the cannon and arms illegally taken from the steamer Taboga, I must confess they afford me little satisfaction. I had expected
when asking for information as to the causes of the frightful occurrences of the 15th inst., that apart from the immediate origin of the tumult, you would have deemed it due to yourself as the Chief Magistrate of this community to state why and wherefore you undertook the fearful responsibility of ordering your police to fire upon my countrymen, women and children, and to state what steps you have taken to punish the guilty and restore the plunder."

"Ten days have elapsed since the catastrophe, and I have yet to learn that a single criminal has been arrested, or that any portion of the immense amount of valuables taken from the passengers and railroad company has been restored. I have yet to learn that your "Conciencia de mis deberes y la inteligencia de los grandes intereses que se ligan á la conservación de esta línea tránsito universal," extends any farther than to order an indiscriminate massacre of the passengers over this transit. I have yet to learn that when a riot or a collision shall take place here between foreigners on one side, and natives on the other, that you recognize any higher obligation on your part than to protect and assist the latter, and disarm, maltreat and plunder the former."

"The deduction, I regret to state, affords me little assurance of the safety of the transit for the future, unless your Excellency shall devise some most speedy and efficacious method for rendering these unfortunate elements less "homogenous" hereafter." The latter concludes with the information that the whole matter had been referred to Washington.

The affair brought the governments of the United States and Colombia, at one time, to the verge of open
rupture, but wiser heads prevailed, and settlement brought about through the payment by Colombia of the sum of $100,000 gold indemnity for property destroyed, and the assurance on her part that no further occurrences of the kind would take place.

ATTEMPTS TO PIERCE Isthmus

The first recorded recognition given the possibility of a canal through the Isthmus appears on an old map in the library at Nuremberg, Germany, drawn by Johannes Schoner. This map is dated 1515 and on it is a rough outline of the American continent with a clear line marked through the Isthmus of Panama. This might be taken as a prophecy.

The first actual survey was made in the year 1581 by Antonio Pereira, but nothing came of it. In 1620 Diego de Mendoza submitted a lengthy report on the subject to Philip II, but that monarch silenced further discussion, saying that the will of God was made manifest by the fact that He had created an isthmus instead of a strait, and that it would be impiety for man to attempt to unite the waters of the two oceans that God had separated. Through Pere Acosta, a religious decree was promulgated declaring the project sacrilegious, and this was followed by an edict forbidding any one under penalty of death from considering such an enterprise.

In 1827, J. A. Lloyd acting under the authority of Simon Bolivar, President of the Granadine Confederation,
made a study of the Isthmus route with a view to establishing a combined rail and water route. His report favored a canal from a point on Limon Bay to the Chagres River, and the use of the latter stream to a point where railroad communication could be effected the most easily from the Pacific coast. He suggested either Panama or Chorrevu as the southern terminus.

In 1838, a French company headed by Baron Thierry obtained a concession from the Government of New Granada, and endeavored to enlist the aid of the French Government in the enterprise. The company’s report was so favorable that the Government was induced to send Napoleon Garella to the Isthmus as its special representative to ascertain the truth of the company’s claims. The promoters reported that a sea-level canal could be constructed without going to a greater depth than 37 feet. Garella’s findings failed to corroborate the company’s claim in this particular, and the enterprise fell through.

In the year 1866 the United States Senate requested from Secretary Welles of the Navy Department for information bearing upon the topography of the Darien region of the Isthmus, with a view of establishing the fact whether or not this part of the country would be suitable for canal exploitation. In a report on the subject made
by Admiral Chas. H. Davis the following year, the latter decried the idea of constructing a canal at this point owing to natural obstacles. By using the Atrato River, the artificial part of the route would be materially shortened, but it would be necessary to tunnel through the Cordillera.

In 1875, the Isthmian route was again surveyed, this time by Commander Edward P. Lull and A. G. Menocal. Their line ran from Limon Bay to the Chagres River, and along its valley to high land, and from thence following the valley of the Rio Grande to the Pacific, practically the same route as subsequently adopted by the French company. About this time Commander Selfridge was also making additional explorations in the Darien region.

While the various Isthmian routes were being considered from different points of view, the scheme for constructing a canal across Nicaragua was also commanding a good deal of attention, and a number of surveys were made. These have however but little bearing on the main point at issue—the Panama Canal.

DE LESSEPS—HIS GREAT SCHEME.

Two powerful influences worked to interest the people of France in the idea of cutting through the Isthmus. One was the successful completion of the Suez Canal, and the other was the personal popularity and magnetism of its promoter, Count Ferdinand de Lesseps. The Suez Canal was begun in 1859, and completed without encountering any serious obstacles, ten years later. This achievement gave De Lesseps a reputation as a canal builder, and made it easy for him a few years afterward
De Lesseps and His Great Scheme.

173
to step into the new field of canal operations and the confidence of the French nation. He was not an engineering expert of the present day definition, but he had a vast intellect at his command, and an unusual facility for organization. That he was over-sanguine cannot be doubted, and that this fault led to his making serious mistakes none deny. On the other hand he was in earnest in his enthusiasm for the success of the project, and fundamentally honest in his purpose. This cannot be said of all those he had under him. As one of his countrymen once remarked, "Of all the men high in authority engaged with De Lesseps on the enterprise, he was about the only one whose chief endeavor was not to feather his nest." Can it be wondered that a fabric built upon a foundation so faulty should be doomed to failure? At the inception of canal operations and for several years afterwards De Lesseps was practically idolized both in France and on the Isthmus. His advent at Panama was heralded as a greater event than that of a conquering general returning home.

Agitation in France in favor of constructing the Isthmian waterway was begun in 1875, and resulted in the formation of a company under the direction of Gen. Turr for the purpose of entering upon negotiations with Colombia to obtain the necessary concession. In May, 1876, Lucien N. B. Wyse, a lieutenant of engineers in the French army, and a brother-in-law of Gen. Turr was delegated to visit the Isthmus, conclude negotiations and map out a feasible route. The right of way was secured, with the proviso that nothing in the contract should be construed to interfere in any way with the grants given the Panama Railroad under a concession to an association of American capitalists entered into in 1849. The concession with "a string tied to it" like this was not entirely satisfactory to the company Wyse represented, which was organized for promotion purposes only, so an enlargement
Coral, an American suburb of Panama.
(Photograph: American & P.R. News Agency & Woodward Bureau, A. B. Creditors.)
of privileges was sought, and on March 20th, 1878, a new contract was entered into with the Colombian Government which gave the association of promoters the right to cross the territory occupied by the Panama Railroad Company, providing an amicable agreement could be arrived at with the latter corporation. Under the terms of this agreement the promoters were given the exclusive right to construct and operate a maritime canal across the territory of Colombia, between the Atlantic and Pacific Oceans, for a period of 99 years from the day it was wholly, or in part opened to public service, or when they should commence to collect tolls on transit and navigation.

It was agreed that the general route of the canal should be determined by an international commission of individuals and competent engineers, and upon settling on a route, the promoters were to be allowed two years to form a joint stock company, which company was required to finish the canal and put it into service in twelve years. All public lands necessary for the route of the canal, and stations, wharves, moorings and warehouses incident to its construction were ceded gratis. This provision also contained the grant of a zone of land about 1,400 feet wide the entire length of the waterway.

It was further stipulated that the canal should remain neutral for all time to the end that in case of war merchant vessels and individuals might enjoy its use and advantages unmolested. For these rights and privileges
the Government of Colombia was to be entitled to a share in the gross income of the canal from all sources on an increasing scale of from five to eight per cent., dating from the seventy-sixth year after its opening, to the termination of the concession, four-fifths of which was to go to the Republic of Colombia, and one-fifth to the State of Panama, the company controlling the enterprise to guarantee however, that the Government's share should not be less than $250,000 each year.

The right to transfer these privileges to other capitalists or companies was conceded, but an absolute prohibition was made against cession or mortgaging to any foreign government.

The international commission of individuals and engineers, known as the International Scientific Congress met in Paris on May 15, 1879. There were present 135 delegates, most of whom were French. Nearly all European countries were represented however, the contingent from the United States numbering eleven. The conference was presided over by Count De Lesseps, and continued in session for two weeks. The net result was the reaching of a decision that a sea-level canal should be constructed from Limon Bay to the Bay of Panama.

This important point settled, the canal concession was transferred to La Compagnie Universelle du Canal Interoceânique de Panama, commonly known as the Panama Canal Company, an organization chartered under the laws of France. De Lesseps was given control and one of his first steps taken was to purchase a controlling interest in the Panama Railroad Company which involved the changing hands of about $18,000,000.

**Arrival of De Lesseps.**

The 30th day of December, 1879, will be forever memorable in the history of the Isthmus, says the *Star & Herald* in its issue of January 1, 1880. At 3 o'clock in
the afternoon of that day the French steamer *Lafayette* with Count Ferdinand de Lesseps was signalled at Colon, and soon afterwards entered the harbor. The steamer came immediately alongside the wharf where the reception committee appointed by the Government, the delegation from the State Assembly, and a large number of invited citizens were collected to welcome the illustrious engineer and the other members of his party.

A little past 4 p.m., the landing stage was put on board and all repaired to the spacious saloon of the *Lafayette* where a formal address of welcome was made by J. A. Cespedes, Chairman of the reception committee, which was responded to in a brief but hearty manner by M. de Lesseps. Then followed short and appropriate addresses by Messrs. Andreve and Prestan of the State Assembly, Mr. Pike, consul for Denmark, and Mr. S. W. D. Jackson on behalf of the English-speaking residents of the Isthmus. To all of these the distinguished guest replied with great urbanity and cordiality, and in all his utterances conveyed the unmistakable impression of his earnestness in regard to the projected canal. An hour or more was spent in convivialities appropriate to the occasion, after which the crowd dispersed. During the reception the fine band from Panama played several soul-stirring airs. In the evening many houses in town were illuminated, and there was a fine display of fireworks at the ice house, the usual headquarters for such festivities. Later, M. de Lesseps came on shore and took a walk in the beautiful moonlight, attended by a few friends and surrounded by an enthusiastic crowd of people.

On the morning of the 31st, M de Lesseps and the distinguished engineers of his party made an examination of the harbor front, and inquired into the direction and force of the northerners. By the aid of a carefully prepared chart he marked the location of the necessary breakwater, as well as the probable entrance to the great Isthmian Canal. In all and on every point M. de Lesseps declared
his great satisfaction at the apparent practicability of the great undertaking, and more than once became enthusiastic in speaking of the prospect. "There are," he said, "only two great difficulties to be overcome, the Chagres River, and the deep cutting at the summit. The first can be surmounted by turning the headwaters of the river into another channel, and the second will disappear before the wells which will be sunk and charged with explosives of sufficient force to remove vast quantities at each discharge. The existence of the railroad will greatly facilitate the work on the canal, and unless closer examination, for which the present visit has been made, should prove unfavorable, a result that is in nowise anticipated, there is no doubt but the work will be begun in earnest and without material delay."

The utmost good order was maintained, and the most profound respect was shown to M. de Lesseps by all classes, while the enthusiasm knew no bounds. The flags of all nations were displayed, with the notable exception of that of the United States, and the reception may be said to have been a decided success.

On the 31st., at 11 a.m., the party left Colon for Panama. The train was met at Barbacoas bridge by the President of the State, and the party was safely transferred to another train by which it arrived in this city at 5:30 p.m. A fine lunch was provided on the train, with wines, which gave entire satisfaction.
Arrival of De Lesseps.

In Panama considerable preparation had been made to do fitting honor to the great impresario. At the station an open tent was placed in which the representative of the State, Mr. Manuel J. Diez, accompanied by Lieut.-Col. Montufar, Gen. Gonzalez, the secretaries of the Government, and other prominent military and civil officials extended him a hearty greeting in the name of the sovereign State of Panama. The party was conveyed in carriages to the Grand Hotel, the battalions of the 3d. and 11th Colombian Guard forming a guard of honor the entire distance. The houses in the Calle Real (the former name of Central Avenue), and other leading streets were profusely decorated with flags in which the French and Colombian colors predominated.

Flag staffs had been erected at convenient intervals along the line displaying the flags of the two Republics. Each staff bore a shield with the name of one or the other of the promoters and engineers of the different explorations and projects for the canalization of the Isthmus. They were of every country and every walk of life; the bold discoverer, the hardy buccaneer, naval officers of various nations, and civil engineers following the peaceful routine of ordinary duty. There were the names of Balboa, 1513; Dampier, 1549; Patterson, 1698; Donozo, 1761, Ariza, 1783; M. Wagner, date not shown; Lloyd, 1829; N. Garella and Courtines, 1843; Totten, 1849; Trautwine and Hughes, 1853; Harrison, 1867; Lull and Selfridge, 1870; and the Wyse-Reclus-Sosa-Verbrugghe-Bixio-Lacharme-Musso and Brooks expeditions of 1877-8. These names were principally displayed in the Plaza, a notable group to whom the world is largely indebted. Among the several arches was one at Plaza Santa Ana reading “Colombia salutes Ferdinand de Lesseps,” and on one other, “Panama congratulates her illustrious guest, Ferdinand de Lesseps.” A banquet terminated the day’s doings, which passed off pleasantly.

Among the De Lesseps party was his wife and three of is children. “M. De Lesseps is now 77 years of age”, says
a current newspaper article and his second wife was but 21
when he married her. They have seven children. The
Madame is of creole origin, her beauty being the type of
that class, enhanced by a pair of magnificent black eyes.
Her form is the admiration of the dressmakers of the
French capital, and a tight-fitting dress sets off her figure to
perfection. There is a great tenderness on the part of the
distinguished engineer toward his little ones. They are
permitted to do pretty much as they choose either in the
saloon, or out of it. It was this sort of paternal manhood
that prompted De Lesseps to escort the Empress Eugenie
and her ill-fated son from the mob that threatened the
Tuileries close on to twenty years ago."

Others in the Count's party were Lieut. Wyse, J.
Dirke, Engineer-in-Chief of the canals of Holland. M.
Bontan, mining engineer of France. M. Dautaz and M.
Albert, engineers of Holland waterworks and canals,
Messrs. Verbrugghe, Couvreux, Blanchet and Fontan, civil
engineers, and Messrs. Bionne, C. Wiener, Gallay and
Dauprat, secretaries.

The Canal Inaugurated.

M. De Lesseps has kept his promise, and the 1st of
January, 1880 has witnessed the formal inauguration of
the work of completing and perfecting the surveys for
the Panama Canal, says the Star & Herald in its issue
of January 3, 1880. The exhaustive documents furnished
to the Paris Congress were amply sufficient to prove the
superiority of the Panama route over all others.

On the 1st inst., a large party of ladies and gentle-
men went on the steamer "Taboguilla" to the mouth of
the Rio Grande about three miles west of Panama. Here
it was intended to land and witness the turning of the
first sod, a task which was assigned to Miss. Fernanda de
Lesseps, which was to mark the beginning of the work
that was to end in the union of the Atlantic and the-
Bird's eye view of Culebra—Panama.

Pacific Oceans. On account of the lateness of the hour at which the steamer left the wharf, it was impossible to carry out the program in its entirety without delaying the return to the city. With the entrance of the "Taboguilla" into the mouth of the river (the first occasion in which a steamer had ever been seen in that place), it was considered as a beginning of the surveys (mark the failure at the start), and the remainder of the program was then proceeded with.

An address was made by M. de Lesseps in which he announced the fulfillment of his promise to begin practical work on the great canal enterprise on January 1, 1880. He further remarked that his labors had now begun under the authority of the United States of Colombia, with the benediction of Monseignor, the Bishop of Panama, and with the assistance of the members of the Technical Commission charged with the definite studies for the Universal Interoceanic Maritime Canal.

He expressed his entire confidence in the enterprise and its success, to which, he said, he consecrated the closing years of his life, and had no hesitation in counting upon the assistance of the financial world for means to open another highway to the commerce of the world. His Grace, the Bishop then formally bestowed his benediction upon the enterprise, and the blessings of the Universal Church upon the labors of science for the benefit of commerce. Other addresses were delivered after which the steamer proceeded to the islands and then returned to the wharf, landing its distinguished passengers who were unanimous in their delight over the trip.

**Grand Banquet to De Lesseps.**

The public demonstrations in honor of De Lesseps' arrival came to a close on Sunday, January 4, 1880 with an elaborate banquet tendered him by Dr. Antonio Ferro, the representative of the Colombian Government.
One hundred and forty invitations were issued, and among those present were notable men from the United States and every part of Europe. M. de Lesseps proposed a toast to "The Press", stating, "That it was the representative of public opinion, and the greatest force of the epoch. With its assistance the greatest commercial interoceanic highway of the world would be made on Colombian territory, under the protection of the Colombian Government and the great powers of the world."

Later he again took the floor and announced that the International Commission had been completely organized, and that it would be divided into five sections. Lieut. Wyse afterwards proposed a toast to the health of the humble laborers, "Without distinction of race or nationality who, in the future may be the useful and modest instruments to carry to completion the greatest work of the age".

First Blast at Culebra.

A numerous party accompanied M. de Lesseps on the morning train of Saturday, January 10, 1880, to
witness the discharge of the first blast on the Cerro Culebra. M. de Lesseps was accompanied by a number of engineers of the surveying party; Dr. Ferro, Colombian Delegate; His Grace, Bishop Paul; Don Damaso Cervera, President of Panama; M. Le Brun, the French Consul, and various residents of the city. With him also was his seven-year old daughter, Miss Fernanda de Lesseps who was to apply the electric spark which was to discharge the first blast in the mighty operation of canal construction.

The mine had been carefully laid in an exceedingly hard and compact formation of basalt, at a few feet below the summit, and charged with thirty kilograms of powerful explosive. The operation was performed with complete success, an immense mass of solid rock being hurled from its original foundation.

The party returned to Panama on the 11 a.m. train exceedingly pleased and enthusiastic over the first practical experiment in canal building on the Isthmus.

**American Press on De Lesseps.**

"The arrival of De Lesseps and his party at Colon," said the *New York Herald* of January 9, 1880, gives assurance that this able engineer is quite in earnest in his desire to add to his great fame as the constructor of the Suez Canal, the greater fame of opening a navigable way between the two principal oceans. He wishes to satisfy himself as to the practicability of his proposed route by personal inspection. It is not likely that any of the obstacles will escape the observation of so trained and competent a judge. If he concludes that none of them are unsurmountable, the world will naturally put faith in his opinion. He has with him H. Dirke, the famous Dutch engineer whose practical achievement in canal making ranks next to the Suez. If the two most celebrated engineers of the age concur in the belief that a ship canal at Panama is practicable at the sea level, capitalists will be
likely to have confidence enough to furnish the means for the undertaking. If the belief of De Lesseps in the feasibility of this route should not be shaken, his energy and alertness will have given him a decided advantage in advance of the advocates of the Nicaragua route.

**Organization of Finances.**

The first canal company was capitalized at $60,000,000, divided into shares of $100 each, and $20,000,000 worth of stock was disposed of without effort. De Lesseps went to the United States immediately after his first visit to the Isthmus, and made a tour of all the principal cities in the interest of the undertaking. He was given an ovation everywhere and succeeded in arousing a great deal of enthusiasm. He then made a similar tour of Europe. At a banquet in Antwerp, a composition was improvised for the occasion reading:

*De Lesseps de sa main forte,
A Suez ouvrit la porte
De l'Occident vers l'Orient;
Par sa force et son courage,
Il va creer le passage
De l'Orient vers l'Occident.*

The immediate result of his missionary work was the prompt taking of the remaining stock offering of $40,000,000 with as much again bid for. The preliminary budget of expenses, including the cost of the concession, footed up to nearly $9,000,000, and was paid out of the earlier subscriptions. One of the most important items of this budget was the profit-taking on preliminary expenses by the organizers of the company. Under the articles of incorporation, the organizers were entitled to certain cash payments, and fifteen per cent. of the net profits. The latter arrangement consisted in the setting aside for the...
benefit of the organizers of some 1300 blocks, or "founders parts", amounting to 5,000 francs each, and constituted a speculation pure and simple. These blocks later sold all the way from 80,000 to 300,000 francs, the profits thereon accruing to the original holders.

Cost of Canal.

The Scientific Congress estimated the cost of the canal at $214,000,000, while the Technical Commission, on which were two American members, G. M. Totten and W. W. Wright, after personally going over the route, formulated a report on February 14, 1880, estimating the total cubic meterage to be excavated at 75,000,000 and the cost of doing it $168,600,000. On February 20, of the same year, De Lesseps in a letter on the subject lowered the estimate to $131,600,000, on the ground that he believed certain figures named by the Commission were
too high. He cut down the items of the diversion of the Chagres, and the Chagres dam by $19,000,000, in which judgment he erred as shown by later developments.

Speaking before a meeting of the Society of American Engineers at New York on March 1, 1880, De Lesseps stated that vessels would be able to go from ocean to ocean after the expenditure of $120,000,000. Referring to the type of canal at the same meeting he said:

"If the committee had decided for a lock canal, I should have put on my hat and gone home. Locks are very good for small vessels, but they would not do for large ships. There is a ship now on the stocks 520 feet in length, and it would take a very long time to take a ship through a canal of this length with a single lock, and with a system of double locks, it would be much more expensive than any deep cutting on the route."

It is interesting to note in this connection that the ship De Lesseps spoke of is something of a pigmy compared with the floating palaces Lusitania and Mauretania of the present day, whose length exceeds the 1880 vessel by more than 200 feet.

**The Era of Activity.**

During the first three years the company devoted its energies principally to the work of preparation and getting material to the Isthmus, although by the end of February, 1883, 500,962 cubic meters of earth had been excavated, and a working force of about 3,000 men established. At the very beginning the laborers struck for higher wages. They went to work for 90 cents silver per day, but made a demand for $1.20 per day, claiming that the cost of living had increased, and that the day laborer in Panama was getting $1.00 per day (1). The demand was granted,

---

(1) Wages of laborers in 1883 were figured in Colombian piastres, worth 84 cents gold each. Therefore the laborer was actually getting 84 cents gold for the day's hire.
A new section of the American Quarters in Culebra—Panama.
Taken from the Reservoir.
and later the rate of wage rose to $1.50 silver per day. The purchase of material was not confined to France, but came from every industrial nation. In 1882 three dredges were purchased of a Philadelphia firm for $400,000.

In February, 1883, M. Dingler assumed control of the works as Director General. From this on an impetus was given to operations, and the work proceeded along more systematic lines. Closely following him came Ch. Aime de Lesseps, son of the elder De Lesseps who later became interested as a silent partner in nearly all the large canal contracts, and derived considerable profit thereby. The original plan under which the work was let to contractors failed to meet the company’s expectations. The contracts were too small and the work did not go on quick enough. Later on the work was let out in large contracts, most of the smaller contractors prior to this time becoming subcontractors under the new system.

The route of the canal began at Folks River, Cristobal-Colon, followed approximately the valley of the Chagres to Bas Obispo, then crossed the Cordilleras through Culebra Mountain, and descended through the valley of the Rio Grande to its mouth, the line ending two miles out in Panama Bay. The water depth of the canal was to be 30 feet, and the bottom width about 72 feet. The problem of crossing the Chagres was to be solved by the construction of a great dam at or near Gamboa, from which the surplus water would escape in another direction by means of diversion channels.

With the inception of canal operations, an era of vast expenditure began. Contracts were placed without due regard to economy, and by 1885 it was apparent that all the estimates made both as to cost and length of time in building would be exceeded. About this time too the investors became alarmed at the ruinous manner in which the vast establishment was being run. The press also took it up and soon a strong undercurrent of adverse public opinion became manifest. De Lesseps essayed to stem the