

## CHAPTER XVI.

THE BUILDING OF THE PANAMA RAILWAY—DIFFICULTIES  
MET IN CONSTRUCTION—LOSS OF LIFE—ITS COMPLETION  
A CREDIT TO AMERICAN ENGINEERING.

IN the chapter on Old Panama frequent reference will be found to the River Chagre, as it was termed then, or the River Chagres, as it is called to-day. The Isthmus of Panama came into prominence during the gold fever of 1849, when thousands crossed to the Pacific by way of the Chagres River as far as Cruces, and thence by mule-back or otherwise to modern Panama. Cruces of to-day is the Cruz of the past.

The traffic across the Isthmus was so extensive owing to the gold fever of '49 in California, that the construction of a railway was deemed imperatively necessary, and the Panama Railroad Company broke ground in the latter end of the year 1850. One reads\* of the great difficulties that had been overcome by the pioneers.†

To thoroughly understand a few of these as met by the early engineers of that road, I have simply to direct my reader's attention to the swamps and jungle described at length in an earlier chapter. The first engineering staff landed there in the fall of 1849. Their quarters were on board a sailing ship. They worked by day, waist deep in mud and slime, making surveys and cutting a trail, and slept at night on their floating home. Nothing but the indomitable will and push for which Americans are justly praised, could have overcome the terrible difficulties that met them at every step. The country was a howling wilderness, pestilential and death-deal-

---

\* "The Isthmus of Panama," Otis, New York.

† "Panama in 1855," New York.



PANAMA CEMETERY, READY-MADE GRAVES.



ing ; the forests teemed with poisonous snakes and other equally unpleasant inhabitants ; night was made hideous by the large, broad-chested, active mosquitoes of that part of the coast, who bite through clothing most successfully ; the country produced absolutely nothing, and every mouthful of food had to come from New York. Despite these obstacles, that brave little band worked ahead, and kept on with their surveys. At the very outset they encountered the difficulty of finding a suitable location for the line traversing the quicksands and swamps between Colon of to-day and Gatun. It is reported that in some of the swamps the engineers under the late Col. George M. Totten, and Mr. Trautwine, failed to find bottom at 180 feet. An embankment was created for the road by throwing in hundreds of cords of wood, earth, rock, and more wood. This causeway, as it may be called, cost a fabulous sum of money ; but at last it was completed and they floated their tracks, so to speak, over the swamps. In early days such sections were graphically called "the soft spots" of the road. Despite their push and means, it took nearly two years to complete some twenty-three miles of the road, or the section from Colon to Barbacoas. Passengers and luggage went from Colon to Barbacoas, and there took *bungoes*, or canoes, and went up the Chagres River to Gorgona, or Cruces, and then by road to Panama. At the close of the year 1854 the road had been completed as far as "the divide," or Culebra. This is the highest point on the Panama Railroad, and is two hundred and thirty-eight feet, six inches, above tide level. It goes without saying that it was the lowest pass found within the mountains. On the 27th day of January, 1855, the first locomotive crossed from ocean to ocean, and Col. George M. Totten went over on her. Thus fully five years had been consumed before the road was built. Afterwards many improvements were made : embankments were strengthened, new bridges were put in, and soft places were fortified.

The cost of the Panama Railroad largely exceeded the

original expectations of the company. On the 13th of March, 1855, the total was given at \$7,000,000.\*

The engineer-in-chief, Colonel Totten, placed it at \$6,000,000, but he did not include many of the additional expenses, such as substantial wooden bridges for trestles, the iron bridge at Barbacoas, costing \$500,000, and other items.

A French writer, M. Emile Chevalier, gave the estimated cost of the railroad on the 1st of June, 1850, at \$4,900,000 ; its prospective gross receipts at \$860,000 ; its annual expenses at \$344,000; and net revenue at \$516,000.†

It probably will be safe to say that the road cost \$8,000,000, or fully three millions over the estimate. The long rainy season played great havoc with the work, and the difficulties which the engineers had to contend with were simply innumerable. No one can appreciate them unless he has lived in such countries and really knows what the wet season means. I shall cite but a single instance in connection with the building of the Panama Railroad in the high levels, to show what railroad cuts within the tropics mean. After they had got on the other side of the "divide" towards Panama and opposite Paraiso, a forty-foot cut was made. Owing to the peculiar soil there, when the first rain came, the surface became saturated and the greasy soil moved into the cut burying the railroad to a depth of some twenty feet. This, remember, on a simple cut of forty feet. One such lesson was ample for the experienced men directing the construction and a new bed was promptly laid over the old one. I have already said that the Isthmus furnished nothing in the shape of food ; everything had to be brought from the United States or abroad. The laborers came from Ireland, and from Jamaica ; there were a lot of Coolies and no end of Chinamen, Colombians and Indians. The great bulk of the material likewise had to come from abroad. Tomes in his

---

\* *New York Tribune.*

† "*Revue des Deux Mondes*," Paris.

work \* gives a graphic and truthful sketch of the swamps and the jungle, and feelingly treats of the climate, regarding which he says, "when to this was added a climate which disposes, from its prostrating heat, to indolence, and an atmosphere the malignant breathing of which is poison, the result which has been accomplished seems almost superhuman."

He also summarizes his view regarding climate as follows :

"The unhealthiness of the climate has been one of the most serious obstacles against which the enterprise has struggled. I need not dwell upon the causes which produce those diseases which are endemic on the Isthmus. The alternation of the wet and dry seasons, a perpetual summer heat, and the decomposition of the profuse tropical vegetation, must of course generate an intense miasmatic poison, and I was not surprised when the oldest and most experienced of the physicians employed on the railway declared to me that no one, of whatever race or country, who becomes a resident of the Isthmus, escapes disease.

"I am indebted to the same gentlemen for some interesting facts. From him I learned that those who were exposed to the miasmatic poison of the country were generally taken ill in four or five weeks, although sometimes, but rarely, not for four or five months after exposure. That the first attack was generally severe; and took the form of yellow, bilious remittent, or malignant intermittent fever. That although none were exempt, the miasmatic poison affected the various races with different degrees of rapidity. That the African resisted the longest, next the Coolie, then the European, and last in order the Chinese, who gave in at once.

\* \* \* \* \*

"The system never habituates itself to the miasmatic poison, and complete recovery from fever, during a residence on the Isthmus, is impossible. The sufferer may

---

\* "Panama in 1885."

arise from his bed of sickness, but totters up and stalks about a mere ghost of his former self. It is thus that I never met with a wholesome looking person among all those engaged upon the railroad. There was not one whose constitution had not been sapped by disease, and all, without exception, are in the almost daily habit of taking medicine to drive away the ever-recurring fever and ague. The Railroad Company are so far conscious of the debility engendered by a residence on the Isthmus, that they refuse to employ those laborers who, having gone to a healthier climate to recruit, return to seek employment. It is found that such are unprofitable servants, and yield at once to the enervating and sickening climate. The enterprise requires all the vigor of unweakened sinews, and of pure, wholesome blood.

\* \* \* \* \*

“ A terrible fatality attended the efforts of the Railroad Company to avail themselves of the assistance of the Chinese laborers. A ship arrived, and landed on the Isthmus some eight hundred, after a fair voyage from Hong Kong, where these poor devils of the flowery kingdom had unwittingly sold themselves to the service of the railroad, perfectly ignorant of the country whither they were going, and of the trials which awaited them. The voyage was tolerably prosperous, and the Chinese bore its fatigues and sufferings with great patience, cheered by the prospects of reaching the foreign land, whither they had been tempted by the glowing descriptions of those traffickers in human life, who had so liberally promised them wealth and happiness. Sixteen died on the passage, and were thrown into the sea. (No sooner had the eight hundred survivors landed, than thirty-two of the number were struck down by disease; and in less than a week afterward, eighty more were laid by their side. The interpreters who accompanied them, attributed this rapid prostration to the want of their habitual opium. This drug was then distributed among them, and with the good effect of so far stimulating their energies, that two-thirds of the sick arose again from their beds, and began to labor. A Maine opium law,

however, was soon promulgated on the score of the immorality of administering to so pernicious a habit, and without regard, it is hoped, to the expense; which, however, was no inconsiderable item, since the daily quota of each Chinese amounted to fifteen grains, at the cost of at least fifteen cents. Whether it was owing to the deprivation of their habitual stimulants, or the malignant effects of the climate, or home-sickness, or disappointment, in a few weeks there was hardly one out of the eight hundred Chinese who was not prostrate and unfit to labor. The poor sufferers let the pick and the shovel fall from their hands, and yielded themselves up to the agony of despair. They now gladly welcomed death, and impatiently awaited their turn in the ranks which were falling before the pestilence. The havoc of disease went on, and would have done its work in time; but as it was sometimes merciful, and spared a life, and was deliberate though deadly, the despairing Chinese could wait no longer; he hastily seized the hand of death, and voluntarily sought destruction in its grasp. Hundreds destroyed themselves, and showed, in their various modes of suicide, the characteristic Chinese ingenuity. Some deliberately lighted their pipes, and sat themselves down upon the shore of the sea, and awaited the rising of the tide—grimly resolved to die—and sat and sat, silent and unmoved as a storm-beaten rock, as wave rose above wave, until they sank into the depths of eternity. Some bargained with their companions for death—giving their all to the friendly hand which, with a kindly touch of the trigger, would scatter their brains, and hasten their doom. Some hung themselves to the tall trees by the hair, and some twisted their queues about their necks, with a deliberate coil after coil, until their faces blackened, their eye-balls started out, their tongues protruded, and death relieved their agony. Some cut ugly crutch-shaped sticks, sharpened the ends to a point, and thrust their necks upon them until they were pierced through and through, and thus mangled, yielded up life in a torrent of blood. Some took great stones into their hands, and leaped into the depths of the nearest river, and clung,

with resolute hold, to the weight which sunk them, gurgling in the agonies of drowning, to the bottom, until death loosened their grasp, and floated them to the surface, lifeless bodies. Some starved themselves to death—refusing either to eat or drink. Some impaled themselves upon their instruments of labor—and thus, in a few weeks after their arrival, there were scarce two hundred Chinese left of the whole number. This miserable remnant of poor heart-sick exiles, prostrate from the effects of the climate, and bent on death, being useless for labor were sent to Jamaica, where they have ever since lingered out a miserable beggar's life.

“The Railroad Company was hardly more fortunate with another importation of live freight. A cargo of Irish laborers from Cork reached Aspinwall, and so rapidly did they yield to the malignant effects of the climate, that not a good day's labor was obtained from a single one; and so great was the mortality, that it was found necessary to ship the survivors to New York, where most died from the fever of the Isthmus which was fermenting in their blood. The laborers now employed, to the number of 3000, on the road are of the mixed native races, chiefly from the province of Carthage, Negroes from Jamaica, and Coolies from the East Indies.”

The Panama Railroad will ever remain a permanent monument to American skill and enterprise and the honor of connecting the two oceans is theirs. I have already given some idea of the estimated revenue, looking at it from Mr. Chevalier's standpoint. The profits paid by that road in times past have been very large, being all the way from twelve to twenty-two per cent. Mr. Chevalier's modest estimate of its cost was \$4,900,000 and its gross receipts \$860,000. As has been shown, the road cost some eight millions, but its gross receipts for a series of years, if I remember rightly, have been about two and a half millions to three millions of dollars per annum, which is the best possible proof of its value. The Panama Railroad Company, while still operating under an American charter is said to belong to the

Panama Canal Company. Its sale by the former to the latter has developed a question with the United States of Colombia that may be awkward for either corporation. The government of Colombia contends that according to its concession to the road, in the event of a sale, twenty-five per cent reverts to the National treasury. The Canal Company, I believe, takes the ground that the road has not changed hands, in that it is still operated under an American charter and that some of the shareholders are still Americans. Whether these arguments will be deemed valid by the sons of Colombia, learned in the law, remains to be seen. While it is quite true that the road is still operated under that American charter, it is equally true that over six-sevenths of the shares were sold to M. de Lesseps' company. It has been stated time and time again, and, as far as I know, the statement never has been questioned, that M. de Lesseps has hypothecated the stock for advances made by prominent banking firms in New York City. It is further alleged that the accrued interest on the money so loaned now represents a very large sum, and, in the future, owing to the complications which surround the great French Undertaker, the road must revert to a strictly American ownership. If such becomes the case, it will still leave the question of twenty-five per cent on the original sale open. And, apropos of the Panama Railroad, I will here refer to a statement that I obtained from an official source. If it is accurate, it is simply another illustration of the profound wisdom that actuated the minds of the men who controlled the stock of the Panama Railroad at the time of its sale to M. de Lesseps' company. It would seem that in the deed of sale a proviso was placed that if the Panama Canal Company failed to complete their ditch, the road would revert to the American Company; and if, on the other hand, the canal became a fact, the sale would hold good. The acute reasoning on this subject is simply delightful. If the canal became a fact the road would be valueless, but if it was a failure the road being still valuable, would revert to the original owners. In the fall of 1879

M. de Lesseps could have bought the road for \$14,000,000, or 70,000 shares at \$200. We must bear in mind that the road cost some eight million of dollars. Previous to De Lesseps' breaking ground, its shares were at par. Its plant on the Isthmus was in a wretched condition, there being but three locomotives that really were serviceable. Following the advent of the Canal engineers in February, 1880, a carefully planned system of obstructing the delivery of the goods of the Panama Canal Company over the line was put in force. The Railway Company controlled the situation, but M. de Lesseps was not in a position at that time to buy, and the obstruction went on to the great detriment of the Canal Company. The shares that had been offered him by the late Mr. Trenor W. Park kept on advancing and advancing, and when he got ready to buy they had increased in nominal value to \$250 each, being an advance on the offer of less than twelve months previously of three millions and a half of dollars, and it was for this sum, less a small amount of stock held by a handful of American shareholders, to retain the charter—that the sale was effected.

The railroad on the Isthmus is a *sine qua non* for the building of a canal. M. de Lesseps' concession from the government of Colombia for the construction of a tide level canal expires in 1892, but long ere that time his company will have gone into insolvency and the work done under that concession will revert to the government of Colombia.\* Since the Canal Company became the proprietors of the railroad it has been thoroughly equipped with a first-class plant, such as powerful engines, new and comfortable cars, and many things that were absolutely necessary. Quite apart from these, miles of new sidings have been put in, and a good harbor has been created at Christophe, Colon; all of which doubtless will be to the great advantage and profit of the future owners of the road. The government of the United States of Colombia is thoroughly in earnest

---

\* This was written before the failure in 1888.

The copyright date is 1888. D.M.S.

regarding its claim for a percentage on that sale. Its claim is a valid one; the road is on Colombian territory, and there can be no question but that eventually the government will get their money. Under the original concession to the Panama Railroad Company the road reverts to the government after a given time. That time was extended for a monetary consideration, and probably it may be extended again. Certain it is the government is master of the situation, and they clearly have right on their side. On the Panama side the railway company have a lot of valuable plant, in the shape of machine shops, paint shops and the like. Within the last few years new and excellent stations have been built, both in Panama and Colon, and the improvements on the road are marked, and consequently valuable.

In concluding this chapter on the Panama Railway, it may be well to cite a fact not generally known. Great Britain could have controlled that most important highway, but with an apathy born of lamentable ignorance, the opportunity was lost, and the control became essentially American, under the treaty of 1846, in which the United States of America guaranteed the sovereignty of the State of Panama. John Bull woke up to find that a magnificent opportunity had slipped through his fingers, and that his keen, quick-witted American cousins had seized upon it. ~~The~~ treaty of 1846 at a later period was amplified and confirmed. This guaranteeing the sovereignty of a foreign State I believe is somewhat opposed to the so-called Monroe doctrine of the United States of America, but in the instance of the State of Panama, it is a fact and the treaty is still in force. I say the treaty "is in force;" but whether the reduction of the sovereign State of Panama to a federal district by National legislation in Bogota alters the status of that treaty, I am unable to say. Panama was deprived of her sovereignty in the spring of 1885. This had been foreseen and commented upon in the American papers—particularly by the *New York Sun*—in the fall of 1884. Many then resident on the Isthmus thought that it was but a

\* Wrong again! GB was correct

preliminary to handing over that strip of Colombia to others at some later period—*i. e.* to *la belle France*.

Let the future be what it may, the Panama Railroad controls that Isthmus, and will control it as long as there is no canal there; and the probabilities of M. de Lesseps completing even a locked canal there are about as remote as his construction of a tramway to the moon.

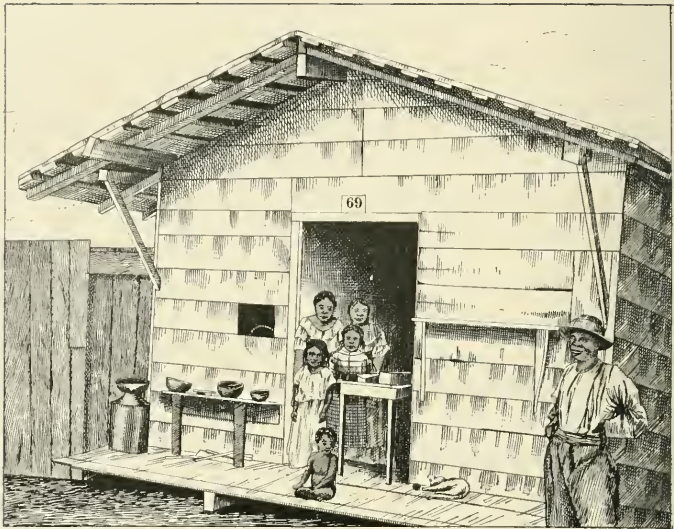
As long as Eads' company do not build their ship railway, or the Nicaragua Canal Company fail to dig their ditch across Nicaragua, the Panama Railroad will have an immense value; but the very day that either of the enterprises alluded to become accomplished facts, the Panama Railroad will be practically valueless, and for the following reasons: The steam companies which have been paying one-half of their whole freights to the Panama Railroad Company for carrying goods forty-seven miles, will not turn one-half of their traffic receipts into the treasury of that corporation. Their vessels will steam through the Nicaragua Canal and save the money now paid to the Panama Railroad Company. The railroad will then be abandoned.

We have already seen how the Americans built the railway in early days in the face of a bad climate, disease, death, and difficulties that seemed insurmountable; now that the sons of enterprising America have taken hold of the Nicaragua Canal scheme, there can be no question in the minds of any of those who are familiar with the subject of trans-Isthmian transit that the Nicaragua Canal will become a fact long ere the Panama Canal Company is in shape to admit even of the passage of a small steamer from ocean to ocean, either as a lock or tide-level canal.

★

★ Again, the fact is  
 had wrong!





SMALL BOY, CLAD IN NATIVE MODESTY. SUBURBS OF PANAMA.

## CHAPTER XVII.

CHINATOWN, PANAMA — SHOPS, AND JOSS HOUSE—MEN AND WOMEN—CONFUCIAN PHILOSOPHY, QUO AD CHRISTIANITY IN TIMES OF DOUBT—THE CHINAMEN A HARD-WORKING, PEACEFUL LOT—BLENDING OF RACES.

ON the Isthmus of Panama there is a large colony of Chinamen. Chinatown, in the city of Panama, represents an important section of it, and before beginning a description of it, I shall state that, long before knowing the Chinese, I had heard a great deal about their abnormalities so called. Upon getting to San Francisco I paid Chinatown a visit, saw the Joss house and their shops. I had heard and read so much about the wickedness of these people that I was anxious to know in what shape they appeared. Judging from the newspaper reports of them they suffer from all sorts of fearful diseases of which we have no experience. While in San Francisco I made inquiries and had a good look at them. Save that their stature is not quite that of the Anglo-Saxon race, they seem to have much in common with the latter, in that they have two arms, two legs, and the usual appendages of a well constructed body. While in British Columbia, and while the Canadian Pacific road was building, I learned from Mr. Onderdonk, an American contractor, that he was thoroughly satisfied with his Chinamen. They worked for about two-thirds the pay of an ordinary white man, and he more than got an equivalent for his money. As a class they were obedient, easily directed, and gave but little trouble. While in Washington Territory at one of the huge saw mills on Puget Sound I also asked about the Chinese element, and found that employers of labor there had perfect confidence in them—and for the best of reasons. John

Chinaman was always at his work. If by any chance he was detained or ill he sent another Chinaman to take his place, and there was no break. They had nothing to do with strikes and were a most satisfactory element to the manufacturer. The ordinary white laborer, usually a foreigner, was bumptious, unruly, impertinent and generally troublesome, and but for the fact that the mill owners had the Chinamen with them they could not have controlled the situation and their difficulties would have been great. Upon getting into Southern California, also on a holiday trip, I inquired about the Chinese there. I found that they were the same peaceful, hard-working, law abiding citizens as in British Columbia. In British Columbia many of them have purchased property, built homes and have settled down. A firm defender of the Chinese in Southern California was the late Col. W. W. Hollister. He recognized their value and worth, and being a man who had the courage of his convictions, he advocated their employment. As far as I could gather from my inquiries at that time, the Chinaman has no vices to which we whites are strangers. Quite the contrary.

During my five years on the Isthmus as a practitioner of medicine I saw John Chinaman "at home." In fact I had the largest Chinese *clientèle* in Panama, and I had every opportunity of knowing them—seeing them ill and well, and under all sorts of circumstances—and where I could form an estimate of them as they live. I can summarize five years' experience by saying that I never saw but one drunken Chinaman, and that I never met with but one case of constitutional disease among them, while I treated no end of it among the whites. The Chinamen at Panama are a hard-working, peaceful, law abiding lot of citizens. Many of them arrived there from China having no knowledge of Spanish, but in an incredibly short time they picked up a smattering of the language, quite enough for the purpose of trade, and then they blossom out as shopkeepers. The wholesale merchants of Panama do not hesitate to give these comparative strangers credit. They pay their debts

promptly, and, speaking from my knowledge of one of the largest wholesale houses there, whose trade with the Chinese merchants in Panama on the line of the Panama Canal and in Colon has been enormous, they never have lost a dollar by them. They are models of patience, they are perpetual workers, and they are a respectful class. It is quite true that some of them smoke opium, but that is the equivalent of our stimulation, save that they do not make the exhibitions of themselves that we do when under the influence of spirits. A few of the Chinamen of Panama have their wives with them. Many of them form quasi-unions with the Indian women of the country, and the offspring of such unions to me were most interesting. Such children have straight black hair, black eyes, and olive skins, while the flattened nose of the Chinaman gave place to the straighter or Grecian nose of the Indian. They are exceedingly bright little people, and I remember many of them among my patients. I can recall no case of cruelty among the men towards their wives.

They had a Joss house in Chinatown, and during the high festivals, flags with fierce looking dragons hung out in front, and the music which they evolved from their extraordinary looking banjos, tom-toms and the like was something wonderful. It is said that by the burning of fire crackers and the playing of their Chinese music they can expel spirits, and I am quite willing to believe it, for no respectable spirit would stay where there is any Chinese music,

As philosophers and logicians they probably are unequalled. A few of them professed the Roman Catholic religion, but the majority of them had their Chinese gods in their quarters, before which they burned their little punk-sticks, the equivalent of incense. Immediately following the great earthquake of September, 1882, and while the smaller ones were going on, I was called to see a sick Chinaman over a Chinese eating shop. I got up into a room where several Chinamen slept on their hard, uncomfortable beds. After seeing my patient I noticed a combination of heathenism and civilization

that amused me considerably. There evidently were a few Chinamen in that building who professedly were Roman Catholics, while the others had remained true to their old loves. But be that as it may, before an image of the Virgin Mary they had a number of blessed tapers, while on the same shelf was a large Chinese god surrounded by inscriptions and the like, before whom Chinese incense was burning. It struck me as being an extraordinary combination of religions, and I couldn't help thinking that while John had adopted the new belief, he seemed to have some doubts about it, and, to be safe, was trying to propitiate the Virgin Mary without offending Confucius.

Apropos of the smoking of opium, it is largely the bane of the lower classes of Chinese. Generally, "once an opium smoker, always an opium smoker," and its effects are most disastrous. To those interested in such matters I cannot do better than recommend to them the reading of De Quincey's admirable book.\* There is a fact in connection with this smoking of opium that is no credit to the English nation. Any one familiar with the history of the opium traffic, if absolutely truthful, will admit that opium was forced on China by England, and that a huge revenue does, or did, accrue to the Old Country from dealing in that vile drug. Strange as it may seem, the government of China has protested against this most iniquitous trade again and again. While we are condemning Chinamen for their smoking of opium, let us cast our eyes toward England and place the blame where it should rest.

The Chinese themselves have a curious version of the story of the introduction of opium into the country. I will try to tell it as one of them told it to me. "W'en Englishman come China he blingee opium: no man hab much food den an' Englishman he say, I takee food an' Chineeman he eatee opium: opium allee same fills dem. Den Englishman, he say, Chineeman he go sleep; bime-bye he die. But Chineeman he heap smart. He makee

---

\* "Confessions of an Opium Eater," De Quincey. London.

dat opium fo' smoke. Den he no hungly an' he no sleep. So Englishman, he one big fool."

Now let us take John Chinaman at home, as I have seen him hundreds and hundreds of times on the Isthmus. Generally he had a little shop in which groceries and all sorts of things were sold; off his shop was his sleeping room of the simplest, and oftentimes his bed consisted of a wooden platform resting on a few boxes on end. This was covered by a piece of cheap matting, while one or two blocks of wood, with hollowed out places to receive the head, formed the pillow. That was John's couch. His clothing, as we are all aware, is of a simple type, and his baggy trowsers are well known. Certainly they are cool and do not interfere with ventilation. Their cooking is simple. They, in common with the majority of the inhabitants on the Isthmus, use small braziers and burn charcoal, and on these a pot or pan is placed to make some savory mess. A great staple of John's diet is rice, and the way in which he uses his chopsticks is something remarkable. In such of the rooms as are occupied by opium smokers they had opium pipes, a little extract of opium, a lamp and a wire. They take the wire and thrust it into the extract of opium, getting out a quantity about half the size of a pea. This they cook in the flame of the lamp until it is moulded into a hard button, when it is stuck on the pipe, and then follows the inhalation of the smoke.

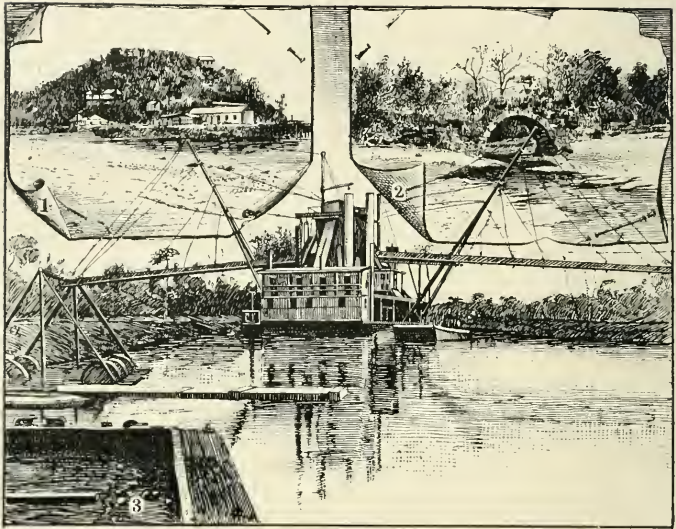
During their holidays an immense number of fire crackers and Chinese bombs were used; in fact, one would have thought there was a bombardment going on. Then it was that John Chinaman came out in his best—silk garments of various colors, rich turbans, ornamental sandals, silk stockings, and the like. Of course I am referring to the upper class Chinese. In fact, there were no end of swells in striking apparel.

The inhuman cry that has gone up in the United States—and I regret to say in some British provinces—against these harmless citizens, is a disgrace to our modern civilization. It is the more a disgrace as it is a concession to a class of men whose chief vocation in life

is to foment trouble, interfere with progress and do everything that they can to disturb work and cause embarrassment.

There is one peculiarity about Uncle Sam that has caused me considerable thought, and it is this: while he passes an exclusion bill for the Chinese, he allows his consuls in Spanish America to be consuls for China. It certainly is a left-handed sort of a compliment to those people, which one may interpret thus: "John Chinaman is not good for me or mine and you shall have him, but as far as it lies in my power I shall look after him." This is the exact status of the Chinese question on the Isthmus of Panama, and on the west coast of South America.





1. ISLAND OF MORRO, GULF OF PANAMA.

2. BRIDGE, OLD PANAMA, FIFTEENTH CENTURY.

3. AMERICAN DREDGE, PANAMA CANAL, NEAR BOHIO SOLDADO.

## CHAPTER XVIII.

THE LAWS OF COLOMBIA AND THEIR APPLICATION AT PANAMA—HOW A MAN SUSPECTED OF MURDER WAS SHOT ON SIGHT—A SOLDIER WHO SHOT A WOMAN—HIS IMPRISONMENT—THE PANAMA PRISON—SEVEN AMERICANS IMPRISONED NINE MONTHS WITHOUT REDRESS—NO CAPITAL PUNISHMENT—THE CHAIN-GANG AT PANAMA.

I HAVE been told by a gentleman who is competent to give an opinion, and in whose word I have implicit confidence, that the code of civil procedure of the United States of Colombia is excellent. It is claimed that it is quite the equal of the historic "Code Napoleon," than which there is no better law. The law on the statute books and its application at Panama, are opposite conditions. I can best make this point plain by citing a case. In one of the hotels beyond the market a man had been killed, and it was supposed that he had been killed by an Italian. The matter was turned over to the Panama police. For days they could get no information of the murderer. At last it was reported that he was on one of the islands in the bay in hiding. Policemen, armed with Remington rifles, were sent down to find him. They saw the man hiding behind some bushes, fired and killed him. They brought the body up to the city at dead low water and landed it on the edge of the reef. They fastened a rope to his heels and dragged him over the ledges of rock for fully half a mile. Upon reaching the Taller the body was thrown into a cart, taken out to the cemetery and buried. Following that, the judicial inquiry was next in order.

Another case in point was that of a soldier who, while on duty watching some of the unfortunates in the chain gang, was annoyed by a woman. She persisted in both-

ering him, when he levelled his Remington and shot her on the spot. It was a main thoroughfare. The bullet went through her, went through a woman back of her, in the line of fire, and broke the leg of a third. The first two died and the third had her leg amputated at the Charity Hospital. Immediately following there was a terrific hue and cry; the friends of the "late departed" ran the man down, he was cast into prison and tried, and despite the facts in the case, his imprisonment consisted of exactly thirty days in the common jail.

The above mentioned cases are no doubt extreme ones, but to my knowledge they happened. The laws on the statute book are excellent, but it will be true to say that justice there, like kissing, is a matter of favoritism. At other times, renderings in court are brought about, by a magical influence that I shall not dilate upon.

In speaking about the battery of Panama I referred to the fact that it forms the upper part of the Panama prison. Of all the dreary places, that prison really is the worst. It is a huge mass of masonry with gratings, facing a small plaza. The men sleep side by side on a rough board platform. The place is constantly filled by the most disgraceful of odors, owing to the fact that there are no closets. Imprisonment there is little better than death.

Some years ago a keg containing \$50,000 in American gold reached the Isthmus. While in charge of the Panama Railroad Company in Panama, the keg disappeared. A number of Americans were arrested and thrown into prison, seven of them all told. I had occasion to see one or two of them in my professional capacity, and found them shut up in a small vaulted room with a narrow slit in the wall facing the sea. When the door communicating with an outside passage was closed they were in a damp, noisome vault. Their imprisonment was simply iniquitous, for there was no proof against them—and yet those unfortunate men were shut up there for months without being brought to trial, or having any specific charge formulated against them. It was thought then, and it is thought now, that

15.  
 missing  
 Dept.  
 jail

their arrest was simply to screen the real culprits. Despite the fact that representations were made to the American government, those men languished in that prison for months without redress. After a time they were put "in liberty," to use the term in vogue there, and never received any indemnity. That is another illustration of Colombian justice.

And I may also state that one or two British subjects were likewise locked up for months and months without any specific charge being brought against them, and despite the fact that the British consul protested against it.

Of the Americans who were imprisoned at that time several are on the Isthmus of Panama to-day,\* and from the fact that they hold responsible positions it seems safe to infer that the public never suspected them. That money was stolen between Saturday night and Tuesday morning. The Sunday referred to was a holiday and the Monday following likewise was a holiday, and on Tuesday morning the money was gone. Of course it made a great excitement. It was \$50,000 in American gold that had been sent to the Isthmus to be transferred to an American man-of-war, then in the harbor, to pay her crew. The money disappeared, and the individuals referred to were arrested and cast into prison. The persons to whom suspicion pointed went as free as air. It is said that that money left Panama on an outgoing steamer for California, that an individual left his house at four o'clock in the morning, got into a boat accompanied by a heavy package, and went off in the steamer. Subsequent crookedness in the same man's career would lead one to believe that suspicion pointed its finger in the right direction. Certain it is that from that day to this nothing has ever been heard of that \$50,000, and the Americans who were cast into prison never got any indemnification, and doubtless they were as innocent as children unborn.

I simply cite this case as to the peculiarities of law, not tabulated in the civil code of Colombia.

There is no capital punishment in Colombia; ten years is the maximum imprisonment if a man kills a dozen men. It was Isthmian experience that the only individuals who got the maximum punishment for murder were foreigners.

I can remember one case where a Jamaican had murdered a woman, and he got the full sentence under the law. During my long residence there I never knew a native of the country to receive it. On the other hand, I can recall a case where an unfortunate American, who had been trading in a schooner to some of the ports north of the Isthmus, on the Atlantic side, had been detected in fraud and then arrested. It was alleged that a prominent merchant in Colon had lost some seven or eight hundred dollars by the fraudulent practices of this American. I have already told you of the soldier that received thirty days for killing two women. This American was brought to trial, and, owing to the fact that his prosecutor was absolutely devoid of conscience and that he possessed great political influence, the unfortunate man was consigned to a fate worse than death, by a sentence of three years in the Panama prison. Every effort was made by his consul to obtain a diminution of the sentence, by showing extenuating circumstances, but nothing came of it. If he lived it was to be three years in one of those noisome vaults, breathing the foulest air, owing to the fact that a small cask received everything through the day, to be emptied only at night; and to be fed on a diet not fit for a dog. Such was his sentence. Fortunately death released him. He went in a well, strong man. Such surroundings, such air and such food terminated in disease, and his troubles were over. This case is well known upon the Isthmus. I do not mention names, but I could do so. It was iniquitous from beginning to end.

Such of the prisoners as are fit for hard labor are sent out in the streets of Panama to sweep them and to do any sort of work that may be necessary. All of those that have been committed for murder wear a chain. It is secured below by an anklet and above by a piece of

rope. They work under a guard of soldiers of the type of that man who shot the two women. One night when in my room in the Grand Hotel I heard a clank, clank, clank, and I looked out to see some of the unfortunate fellows going by in the dark, carrying a late comrade out to the cemetery. A man with a lantern led, and the military guard followed.

While on the subject of laws, some legislation that was enacted this year\* may prove interesting to my readers. I have thought it well to quote the law in Spanish, word for word, as it was published, and below it to give a careful translation:

“ART. 34. El matrimonio contraído conforme á los ritos de la Religion Católica anula *ipso jure* el matrimonio puramente civil, celebrado antes por los contrayentes con otra persona.

“ART. 35. Para los efectos meramente civiles, la Ley reconoce la legitimidad de los hijos concebidos antes de que se anule un matrimonio civil á virtud de lo dispuesto en el artículo anterior.

“ART. 36. El hombre que habiéndose casado civilmente, se case luego con otra mujer con arreglo a los ritos de la Religion Católica es obligado a suministrar alimentos congruos á la primera mujer y á los hijos habidos en ella, mientras está no case catolicamente.” †

This is the translation:

“ARTICLE 34. Marriage contracted according to the rites of the Catholic Religion of itself annuls (*ipso jure*) a purely civil marriage previously celebrated by the contractants with other persons.

“ARTICLE 35. For the purely civil effects of the Law, it acknowledges the legitimacy of children conceived prior to the annulment of a civil marriage by virtue of the provision of the preceding article.

“ARTICLE 36. The man who having married civilly marries subsequently with another woman, according to the rights of the Catholic Religion, is obliged to provide maintenance for the first wife and for the children had by her, so long as she does not marry according to the Catholic Rite.”

\* 1888.

† *El Cronista*, Panama, of March 24, 1888.

While describing the churches of Panama I referred to the fact that the Church of Rome had been dispossessed, and that priests and sisters of charity had been driven out of the country, and that the church had been despoiled, presumably for the benefit of the government. Of late years Rome has been feeling her way very cautiously, strengthening her hands at every turn, until to-day she feels her strength to be such that, according to the laws quoted above, civil marriages of the past have been annulled. If there is one thing more than another regarding which the Church of Rome has been as "firm as a rock," it has been on the question of divorce—that once married nothing could undo the marriage, save the cause of adultery. It would now seem that according to the laws of Colombia the civil marriages that have been in force for many long years, can be broken, by any one who wishes to put from him his wife, if the marriage was not according to the Catholic rite. To all lovers of liberty properly so called this retrograde movement in Colombia, whose boast is that her laws are the counterpart of the great republic of the north, will cause both surprise and pain, especially when they think that Rome has struck this blow at the most sacred of institutions.

Under the laws of Colombia the press was at full liberty to discuss any subject. Strange to say, this law has been repealed, and under severe penalties the press is prohibited from publishing anything that reflects upon the civil administration or the Church of Rome. In fact, to such a pass have things come on the Isthmus that the press is no more free than is one of those unfortunates in the prison at Panama. All of this seems the more incredible when we bear in mind that it is a purely republican form of government. The influences back of the executive are well known. Things have taken such shape in that country that to be a free mason means that a man cannot be buried in consecrated ground, and the why and the wherefore of introducing the iniquitous laws dissolving civil marriages are well known to those in Bogota. From my recent visits to

the Isthmus and from information received from there while away, I personally am of the opinion that this iron-handed legislation—this violation of the rights of individuals and of the press—can have but one end—a revolution that will shake that country to its centre; and rightly so. It is impossible to suppose that any intelligent people who have been as free as the air of heaven can reconcile themselves to legislation of this type, which is unworthy of the Autocrat of all the Russias.

## CHAPTER XIX.

THE GREAT EARTHQUAKE OF SEPTEMBER 7, 1882—EFFECTS AT PANAMA, CRUCES, COLON AND TOBOGA—TIDAL WAVE IN THE GULF OF DARIEN—LOSS OF LIFE, ETC.—EARLIER EARTHQUAKES IN COLOMBIA.

ON the morning of September 7, 1882, I awoke fancying that some one had got into my room in the hotel and had shaken my bed or got under it. I sat up in bed, looked about the room, but could see nothing, for there was but little moonlight. I couldn't understand the thing and stepped out on the hotel balcony. While standing on that balcony trying to account for the cause that had awakened me, the whole building trembled violently, and there was a groaning, crunching noise that I never shall forget.

The balcony that I was on was some forty-five feet above the street. Before the earthquake, and when taking my room on that floor of the hotel, I had looked around to see what to do in case of fire. As soon as the terrible vibration began I stepped over the railing of the balcony and down on the railing of the balcony of the adjoining house, then jumped to the floor, and ran its full length as rapidly as I could. On getting to the end there was a house some ten feet below me. The only idea I had at the time was that I did not like to die like a rat crushed in a cage. Having had no experience with earthquakes within the tropics I didn't then realize that it was one. Following the violent shake all was quiet, and I retraced my steps, climbed up the balcony, and got to the upper balcony of the hotel. My neighbor in the room adjoining mine, was Senor Don Pedro Merino. He had tried to escape from his room by a door leading into the upper hall, but the door was



TAMARIND GROVE, VILLAGE OF RESTINGUE, ISLAND OF TOBOGA.



jammed, and he couldn't open it. He came to the door of my room, saying that in all his experience in Central America he never had felt so violent a shock. I went into my room, and as soon as I realized it was an earthquake, I looked at my watch; it was 3:20. My bath tub had been partially filled with water the night before for my morning bath. The oscillation of the building had thrown a part of its contents over the floor, bottles were knocked down, others were broken, and the ceiling and walls were cracked. In places parts of the former had fallen. The wall of that strong building at the back, where it was fully two feet thick, showed a crack of nearly two inches. We dressed as hastily as possible to get out into the open, and when we got down into the lower hall found the servants gathered there. The building that we lived in was the *Surcursale*, or annex of the Grand Hotel, and was in the highest point of the city. Hence it felt the vibration more than buildings lower down. When we found the Colombian servants they were sadly frightened. It would seem that when the first shock came they opened a front door to rush out into the street, but did not do so as the tiles on the house came down in a perfect shower. Immediately following the shock and before we had walked down to the main plaza, the whole city was alive with exclamations of terror, and the streets were full of excited people, many of whom had candles. We got into the plaza a little after half past three—it doesn't take people long to dress when earthquakes are about.

I shall never forget the scene in the plaza. It was black with people who had reached there in safety, and had got in the open and away from buildings that were expected to fall. There was still a little light, and the moon was in its last quarter. The hum of voices there and the excitement was something astonishing. There they were, people of all classes—black and white—some dressed, and some very hastily dressed, and some had brought chairs with them. An elderly lady belonging to one of the oldest and most distinguished of Colombian families was found dead sitting in her chair. It was an

old case of heart disease, and it simply required the excitement to kill her.

The upper part of the wall, making the front of the façade of the Cathedral, had been shaken into the plaza; huge masses of masonry had fallen down upon the stone steps in front of the old building, breaking them and driving them into the earth. The Cabildo, or town hall, was wrecked. The lower part was a cloister of the old time Spanish type, with columns and arches. Above there had been another series of arches giving a front balcony with its roof. The latter with the columns had been thrown into the plaza, and many of them were broken into fragments, while a part of the main roof of the building had been shaken down and off. Its front was wrecked. The Canal company's building, while it showed no visible damage, was badly cracked, and a repetition of a shock of equal intensity probably would have thrown part of it down. As soon as a little daylight came in, it was found that the arches of the Cathedral had been badly damaged.

With the return of daylight all seemed to recover some courage, for if there is anything that unnerves one, it is to feel the earth violently tremble under one, and hearing buildings groan. There was a vast deal of damage done in the city; walls had been thrown down, and there had been some accidents. A doctor of law in his fright had jumped from a balcony and broken his leg. In a house on the Calle Real a man and his wife had left their bed just as the upper wall of an adjoining building came through the ceiling, burying it under the *débris*. I should also say that at the Cathedral a number of the Saints had been shaken from their niches in its front. The old tower of the Chapel of Ease, opposite the Quinta of Santa Rita, had been shaken down, burying a wooden shanty from which the family had just escaped. The only fatality in the city of Panama was that of the old lady who died in the plaza.

As the morning advanced we all became more collected, and speculation was rife as to the exact starting-point of the earthquake, the majority fancying that the

wave had travelled southward from Central America. At that time the cable ship *Silvertown* was in the harbor, a huge vessel belonging to the India Rubber, Gutta Percha and Telegraph Company, of London, England. She had just completed the laying of the cables of the Central and South American Telegraph Company, from Peru to the Isthmus and thence to Mexico. The chief of the cable staff, Mr. Robert Kaye Gray, F. R. G. S., was on shore. After hearing all that was to be ascertained regarding the earthquake and examining a number of buildings, together with my quarters in the hotel, which he considered had suffered most, he expressed the opinion that its origin was local. The cable of the West India and Panama Telegraph Company from Colon to the West Indies, and thence to Florida in the States, had been broken. Thus we were shut off from that side, and could get no news from the outside world. The Central and South American Cable had been successfully laid but it still was in the hands of contractors, or Mr. Gray's company. The interests of the Cable Company proper were represented by Mr. J. H. Stearns, a gentleman whose patent for duplex telegraphy has made him well known in the scientific world. Thanks to the courtesy of these gentlemen, I was enabled to send a press despatch—the very first—over their cable to New York. I sent the *Herald* four hundred and eighty-five words. Later on we got information as to what had happened in other places. The crews on the vessels at anchor off the islands of Naos and Flamenco were roused from their sleep—such as were not on duty—and supposed that the vessels had grounded or were dragging their anchors. The island of Toboga, nine miles from Panama, had had a severe shaking and part of a substantial cliff had fallen into the sea. Some people came over to Panama from the Colon side, and then it was that we learned that the shaking in Colon had been even worse than on our side. From the city of Colon to Baila-Mona the Panama Railroad had been rendered almost useless. In places the road-bed had sunk; in others it was completely thrown out of line, and for two and twenty miles this

condition of things obtained. The long bridge, of over 600 feet, at Barbacoas was thrown slightly out of line.

In speaking of Morgan and the river Chagres, reference has been made to Cruz of those days, or Las Cruces of to-day. The latter settlement is not very far from one of the central railway stations on the Isthmus. Previous to the earthquake there had been a substantial stone church there. That building literally had been shaken to pieces. Its ruins were photographed by M. Demers, chief of the photographic service of the Panama Inter-oceanic Canal Company. Not a piece of the wall four feet high was standing. We learned subsequently that several lives had been lost in a small village between Colon and Panama.

With Colon on the Atlantic my readers are tolerably familiar. The majority of its buildings were of wood. The violence of the shock was such that piles of plank, put up in the usual way, were shaken down and, bad as our experience was in Panama, certainly the earthquake violence there was greater. It was such that people who attempted to walk, were thrown off their feet. There were also a few accidents. As usual, under such terrible circumstances, the majority absolutely lost their heads. Strong men, who under ordinary circumstances would have undergone almost anything, were as helpless as children. When daylight came upon the scene in Colon, it was found that a great rent crossed the island from near the substantial stone freight sheds of the Panama Railroad Company right along the front street to the earthen embankment connecting the island with the main land. Later on a fissure was discovered running along the right bank of the Chagres. It was traced some three miles and varied in breadth from several inches to a mere crack, closing below in abyssmal darkness.

I was told by Mr. Burns, an intelligent American contractor, who was then mining in the hills between Colon and Panama, that men in his camp were shaken off their feet, and that a mule fell and rolled over and over. That was the earthquake of the first day. The next morning about five o'clock there was another one. I

did not dare stay in the hotel, as it was so badly damaged. The lofty buildings practically were abandoned, and all who could go out of town, went out into the open country, sleeping under tents or any shelter they could get. Business was absolutely at a standstill; the sick forgot their illnesses, and the only subject of conversation was *los temblores* or the earthquakes. A friend, now resident in St. Thomas, had offered me a shake down over the Colonial Bank. While nobody was afraid, the sociability was intense. The next morning, at 4:53, there was a violent shake, and we hurriedly dressed and got out into the street. As usual, the whole town was alive; all of our fears had been reawakened, and a feeling of impending disaster impressed everybody. When daylight came we were out in the Plaza St. Anna, and well do I remember the first pencillings of light along the horizon and the quiet delight with which we welcomed it.

While severe earthquakes during the day are bad, in the darkness of night they really are appalling. On the second night after the earthquake, I accepted an invitation from another friend, whose building was not so lofty as the bank, in which I had passed the previous night. He adopted an ingenious device, well known in earthquake countries. In subsequent press letters I dubbed them "Stearns' Earthquake Detectors." He stood two soda bottles and a number of mineral bottles on their mouths. Any shock would upset them and give an alarm. The tremor that night was but a slight one, and on the third night I slept in the hotel proper—in a way, for we were all so unstrung by the intense nervous strain, that restful sleep was out of the question. The building of the Cable Company, in which I passed my second night, was so damaged that one of its walls subsequently had to be stayed up and secured. At that time the Panama Canal Company had a maregraph at Colon, and it was found that there had been a species of tidal wave, as indicated by the perpendicular tracings made by that instrument. As I have stated, the Panama and West India Company's cable was broken, and

the other cable was not open to the public as it had not been transferred by the directors to the company, and consequently we were shut off. There is a general impression that "news travels by post," but, as an exception to the rule, I may here state that, upwards of a month subsequently, we received information on the Isthmus to the effect that a tidal wave had swept some of the islands on the Atlantic side in the vicinity of the Gulf of Darien. It swept across them, washing away ranchos and inhabitants, and some sixty-five people perished. But, as I have said, we only learned this a month later. It would seem that the centre of seismic disturbance had been a little to the south of the Isthmus of Panama and almost opposite the old Isthmus of Darien. Hence, the tidal waves that swept the islands in the Archipelago in that direction, and the earthquake wave which so violently shook the Isthmus.

I kept records during the "shakes." After the fifth day there were no strong, but many minor, ones. I have notes and records of them by the dozen.

The third violent shock was about the fourth day; it occurred about eleven o'clock, P. M., when, in common with others, I was tremendously pleased to get into the Plaza Triompha and out in the open. The only idea that seems to actuate one under such circumstances, is to get away from buildings, or anything that can fall upon one. While we were in that Plaza—everybody talking to everybody, for on such occasions formalities do not exist—there were violent shakings, and in a street near us there was a rush and considerable excitement caused by a hysterical woman's shrieking.

On the afternoon of that day an old acquaintance of a friend of mine had visited his house, and it being late at night asked the privilege of staying there. She was allotted a room and a hammock. On the morning subsequent to this last shock they found she was not awake, and thought she had overslept herself. Later, finding she did not move, they approached her hammock and found her dead—another case of heart disease, her death being caused by excitement.

While making no professions of bravery, I have yet to learn that I lack the courage common to most men, but for weeks after that experience when in the quiet of my room at night, surrounded by cracked walls, whenever I allowed my mind to dwell upon the awful scene, I would shiver from head to foot. It was a fearful experience. If there is any one thing that utterly unnerves one, it is an earthquake of that type—one that will shake buildings to pieces, partially destroy a railroad, and create the havoc and destruction of that terrific earthquake of the 7th of September, 1882.

As soon as it was possible to collect reliable data I sent a series of letters to the *Montreal Gazette*, and they were published *in extenso*. Following their publication there was a lot of scientific discussion in the Old Country, as to what would be the effect of an earthquake on a completed canal. Scientists took the ground that the embankment on the side whence the wave came, would suffer most, and that an earthquake of that violence would seriously damage any canal.

As soon as possible I instituted careful inquiry as to the history of the early earthquakes on the Isthmus, for, when I became a resident there, I had no knowledge of earthquakes, nor had I ever heard of any in connection with that neck of land. From the typical "oldest inhabitants" I learned that the earthquake in the fall of 1858, that had so damaged Carthagena on the Atlantic, had done a great deal of damage in the City of Panama. I also learned that upwards of a century ago the country had been terrifically shaken from Santa Fé de Bogota to Panama, and that about one hundred thousand lives had been lost. Some ten years prior to the earthquake of 1882 there had been a violent shock, the greatest force being felt in the State of Antioquia, to the south of the Isthmus. A pueblo, or village called Cucuta, was literally shaken down and upwards of five thousand people lost their lives.\* It will be seen that earthquakes in Colombia are not modern inventions.†

---

\* *Star and Herald*, Panama, 1878.

† "Humboldt's Travels."

A remarkable feature in connection with that earthquake period at Panama must not be overlooked. It would seem that my despatch to the *New York Herald* was cabled abroad, and it all but produced an earthquake among M. De Lesseps' shareholders. He at once informed the world that there would be no more earthquakes on the Isthmus. Strange to say, despite the utterances of this celebrated man, the earthquakes kept on, to the unstringing of our nerves and to the contradiction of even so distinguished an individual as Count Ferdinand de Lesseps.

Another statement in connection with this and I have done. Such of my readers as are familiar with the historic Paris Congress of May, 1879, that was called together to consider the Panama Canal, will remember that M. de Lesseps denounced any Nicaragua route as impracticable, owing to the fact that it was a land of earthquakes, and that the only route was that at Panama. The only interpretation that one can place on such a statement is, that M. de Lesseps had settled on the Panama route before calling his scientists together. And such was the case. That he, as an intelligent man, could have made such a broad statement, savors of absolute ignorance regarding the past of the Isthmus; as that indefatigable traveller and great authority, Humboldt, refers to the peculiar formation of parts of Colombia and the terrific cataclysms that must have obtained there in early days.

Within the last few days\* I note that the adjoining Republic of Ecuador has been violently shaken by earthquakes, and so violent were they that they produced a panic among the people. What effect such earthquakes would have upon a tide level canal or any other canal are best imagined, and description is unnecessary.

---

\* April, 1888.





AFRICAN METHOD OF HOLDING CHILDREN ACROSS HIP, GULF  
OF PANAMA.