

A paragraph or two from the Report on Topolobampo and its back-country resources, by, the Hon. Wm. K. Rogers, of Columbus, Ohio.

"I am not able to write from personal observation anything with reference to the great mineral region of the Sierra Madre, "the treasure-house of the world," as it is called by Humboldt, having had no opportunity as yet to visit it. Its wonderful wealth of the precious metals and other minerals is very pertinently referred to by Hamilton in "The Border States of Mexico," in connection with his remarks upon the new era now dawning upon Mexico, and the splendid future it promises. "We boast," he says, "of our mines in California, Nevada, and the Territories, where we have but the border of the vast mineral region that nestles in her bosom. She possesses the matrix of all our mines of gold and silver and copper and other minerals, while we have but the outcroppings. Her mines have for centuries yielded vast riches, and are almost untouched in comparison with the hidden treasures that are yet to be developed."

The mountain ranges to which I have referred along the river were noted by me on the way up the valley with much surprise. The information we have had with regard to the mineral resources of the country has been, with the exception of the neighborhood of Mazatlan, confined exclusively to the Sierra Madre proper, and its immediately adjoining spurs at Alamos and eastward of our coast line. I was not aware of the existence of these ranges of the valley of the Fuerte until I saw them, and it was very gratifying to be informed that they will furnish resources so near and so important for the increase of traffic on this section of the main line.

A list of mining properties in the mountain ranges of the Fuerte and Sinaloa valleys, and the Sierras drained by their tributaries, has been prepared for me here, numbering 850 mines of gold, silver, copper, and magnetic iron, that are now or can be profitably worked, whose products and supplies would be transported over the lines of our road. The record of the yield of many of these mines is extraordinary; of some of them, perhaps, unsurpassed in the history of mining.

One of the most notable deposits of magnetic iron ore in the world, of remarkable purity and practically inexhaustible in quantity, lies immediately on the proposed route of the main line of the road, near its eastern terminus, within short haul of the coal fields of the Rio Grande, crossed by this line, and among the iron ore mines included in the list referred to is a similar deposit near the eastern terminus of the first section of the line in this valley. Mr. Saulsbury, the owner of the controlling interest in the Benson smelter, with whom I travelled from Deming to Benson, and whose attention had been called to our railroad enterprise, and the advantages of Topolobampo bay as a shipping point for the products of the Sierra Madre and its spurs, said he regarded it as destined to be one of the best points on the Pacific coast for a smelter, and that on the completion of our road to the mountains, and the branches to Alamos and southward, he and his associates would join in building a smelter of large capacity at the bay, sufficient to accommodate the mining interests of this section of Mexico."

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"Down on the coast of Sinaloa is the splendid natural harbor of Topolobampo; and if a railroad does not reach that port reasonably soon, I have authority for saying that it will be through no fault of Diaz. Indeed, among his specific dreams for the general uplifting of his nation, one of the dearest is to thwart that astounding geography, - so well defined by Humboldt, - which splits Mexico in twain from top to bottom."

"The Awakening of a Nation", page 80, by

Charles F. Lumis.

"Topolobampo Harbor here then justifies what has been said of it. It is one of the greatest harbors of the world, and is as certainly destined to be the site of an important commercial and manufacturing seaport, as to the broad and beautiful valley of the Fuerte River and the Sierras at its source will be the theatre of a most prosperous development of agricultural and mineral industry."

Hon. Wm. K. Rogers.

Mr. J. Esdaile Florance, page , is a mining engineer, and was the adviser for the Sonora and Sinaloa Mining and Smelting Company, when they selected their great Copper and Gold properties near Baca, Sinaloa, 100 miles eastward from Topolobampo.

Engineer E.A.H. Tays, (see preface) went to Sinaloa with Mr. A.K. Owen in 1883 to start the railroad surveys from Topolobampo eastward, north and south; and he has been largely associated with the enterprises in Sonora, Sinaloa, and Chihuahua ever since.

Hon. W.K. Rogers, who is quoted, page , during twenty-five years was the law partner of Rutherford B. Hayes, in Ohio. When Mr. Hayes became President of the United States, Mr. Rogers became his private secretary and confidential adviser; and immediately after leaving the White House he went with Mr. Albert K. Owen to Sinaloa, to look up the land titles in and around Topolobampo harbor, and he remained there eight months.

Captain Von Motz, page , was an officer in the German army during the Franco-Prussian War and some time before going to Topolobampo, was the chief draughtsman and Engineer for the Denver and Rio Grande Railroad Company.

Engineer Henry B. Holbrook, page , was the consulting engineer of Gen. William J. Palmer during the surveying of his railroad in Colorado and Mexico, was the chief engineer of the Atlantic and Pacific R.R. during its construction, and was the builder, and is the owner of the Pueblo Irrigating System of Colorado.

Mr. Noble E. Dawson, page , was amanuensis to Gen. Grant when he wrote his memoirs, as also for many years the chief stenographer for the House of Representatives at Washington, D.C.

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Mr. Jesse R. Grant, page , who speaks of his visit to Topolobampo, is the youngest son of the late Gen. Ulysses S. Grant.

James Campbell, page , was for 20 years the chief constructor and general manager of the new railroads built by the Central and Southern Pacific R.R. companies in California, Utah, Nevada, Arizona, New Mexico, and Texas.

Mr. John G. Dawkins, page , went to Topolobampo in 1886 from Colorado, and is living at "Los Mochis, the American farm lands fifteen miles eastward of Topolobampo.

PREFACE.

"Topolobampo is situated in the State of Sinaloa, on the Gulf of California and midway between Guaymas and Mazatlan. Captain Preble, U.S.N. and others who have examined it, tell me, that it is easy of access, a safe and secure harbor and can be entered by vessels drawing twenty feet of water; and, in my opinion, its location, good anchorage, and other advantages indicate the right place for the most important City on the West Coast of Mexico."

David Turner, U. S. Consul,

La Paz, Lower California.

"All the products exported and imported into Southern Sonora and Northern Sinaloa are bound to find an entrance and exit through Topolobampo. This harbor is destined to become the chief port of the Pacific Coast of Mexico. I venture to say that before the end of the present decade there will be at least three railroads commencing or terminating at Topolobampo. The possibilities of this section of the country are beyond conception. Once the modern civilizer, -The Iron Horse,- strikes its hoof on this soil, the change will be magical."

E.A.H. Tays, C.E.

"I am familiar with many of the finest harbors in the world, but for natural beauty I know of none to excel, and few that equal, the bay of Topolobampo. We dismounted from our mules and sat for some time upon the shore, admiring the graceful lines of the harbor, watching the sea fowl, and speculating upon the time when this spot would be alive with the business of all nations."

FROM THE REPORT OF MR. GEORGE W. SIMMONS, JR. THE "OAK

HALL MERCHANT, "OF BOSTON, MASS

Her Majesty's Consul says of the Port of Mazatlan:- "Only small coasting vessels can now come inside the bar, and even their anchorage is getting yearly more reduced in size. Foreign vessels have to lie outside in an open roadstead, much exposed to the southerly and south-westwardly gales which blow between June and October."- (H.M. Consul's Report No. 665, 1891, p. 21.)

GUAYMAS.

W.K. Rogers, the private secretary of the President of the United States, Hon. E.S. Hayes, says of the harbor of Guaymas which is 200 miles north of Topolobampo on the Gulf of California:- "It is impossible to make Guaymas a port of convenient wharfage, or a desirable place of residence, during a considerable part of the year. The Sonora Railroad Company is prosecuting, at a great cost, a very elaborate plan of dock improvements there, but vessels of ordinary draught must always anchor a long distance from the wharf and transfer freight and passengers by lighters. It will always lack the essential requirements of sufficient depth of water and area for the convenient ⁱⁿaccommodation of vessels of large class."

JOHN D. LONG,

Secretary,

NAVY DEPARTMENT.

Washington, D. C.

February 13th. 1902.

Dear Sir:-

Replying to your letter of February 8th., requesting a copy of the report made by Commodore Truxton, of the port of Topolobampo, in the year 1869. I take pleasure in forwarding herewith a copy of extract taken from the private journal kept by Commodore William T. Truxton, commanding the U.S. Sloop of war "Janestown", off Topolobampo, Mexico, in March 1869, which it is presumed, is the report you desire.

Very respectfully,

(Signed) Chas. H. Darling.

Acting secretary.

Hon.

United States Senate,

Washington, D. C.

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Extract from private journal kept by
Commodore William F. Truxton, commanding the
U.S. Sloop of War "Jamestown".

"Off Topolobampo, Mexico.

March, 1869.

"On the 21st. was informed by a native that the ship was off Lahagui, the mouth of the River "Ahome" (Puerto); shifted our anchorage to Latitude $25^{\circ} 33'$ North, Longitude (Chro) $109^{\circ} 21' 27''$ West, in 10 fathoms water, hard grey sands.

"The entrance to this harbor and the inland sea of San Carlos is in Latitude $25^{\circ} 32'$, North, Longitude $109^{\circ} 14' 25''$ West, and through which three and one half fathoms can be safely carried at low water.

"The land of Topolobampo, and the island of San Ignacio, between which are the straits of Topolobampo and entrance to the Bay of San Carlos, is high and easily distinguishable.

"With the Parallone San Ignacio (in Lat. $25^{\circ} 27'$ North, Longitude $109^{\circ} 27'$ West) bearing S.W. by S. (Mag) you have a fair view of Topolobampo straits.

"With the Parallone San Ignacio bearing S. $54^{\circ} 1/2$ W. (Mag) the entrance between the sand banks bears N. $54^{\circ} 1/2$ East (Mag)

"You can then stand in on that course (N. $54^{\circ} 1/2$ E.) with safety till you see the breakers on either side of the smooth water of the channel; the soundings decrease regularly and gradually, bottom smooth, hard sand, free from all dangers.

"When on this line, the straits of Topolobampo will be shut in and you must be careful not to be misled by an apparent opening a little to the Northwest of the N. $54^{\circ} 1/2$ E. and S. $54^{\circ} 1/2$ W. line given above.

the approaches are made, it will be well to keep about half way between the Parallons and the mainland, and between the west and S.S.W. points of the compass, before standing in too close.

"The set of the tide, on and outside the sand banks, are not determined; they are quite strong---apparent rise and fall seven (7) feet.

"The high lands of Topolobampo are faced but separated by a narrow strip of water from a bright, yellow sand beach, which stretches away to the Northward and westward, and is lost in the distance.

"It makes a good mark for the North-east side of the entrance as you approach from the westward, and in the afternoon shows well. We carried four (4) fathoms to within 300 feet of this beach.

"The water of Topolobampo harbor and straits varies from six (6) to fifteen (15) fathoms, till well in San Carlos Bay when it gradually shoals. Further investigation, however, may develop good channels through this magnificent inland sea.

"In Topolobampo fair drinking water may be obtained by sinking wells in the sand on Conchal Point. Wood is not to be had except the thin growth of Chaparral that covers the high hills of the vicinity.

"No signs of fresh water in San Carlos Bay; no wood, no arable land, and no desirable place to locate a city could be seen during the brief time given to its investigation.

"The anchorage outside is perfectly safe, as a ship could always lie off shore with a S.E. or S.W. wind, should it begin to blow.

"Inside Topolobampo vessels are entirely protected from the sea, while only S.W. and W.W. winds would be felt; in 'San

NO MORE SECURE ANCHORAGE IS TO BE FOUND, WHILE WITH THE AID OF TWO OR THREE BUOYS, ACCESS TO IT COULD BE MADE PERFECTLY SIMPLE, MORE SO THAN TO MOST OF THE HARBORS ON THE COAST OF THE UNITED STATES, SOUTH OF BOSTON.

"There are many rivers emptying into the Gulf of California not laid down on the charts. I am satisfied, also, that other good harbors will be found when this country, which for hundreds of years has suffered from the curse of misrule, shall pass under the control of an enterprising people.

"Imrays chart, -probably the best at present published, - is exceedingly incorrect; in fact the geography of the North West passage is better known than that of this eastern shore of the Gulf of California."

Guaymas, Sonora, Mexico, December 22d. 1863.

A.E. Owen, C.E. Washington, D.C.

My Dear Sir,

In compliance with your request I will now give you the exact information regarding the Topolobampo bar:

1st. In the middle entrance you have 3 1/2 fathoms of water.

2d. At the North entrance 5 fathoms.

3d. On the south side or entrance you have 4 fathoms of water.

All the above measurements are at low tide.

The bar is something like 300 feet wide.

After leaving the bar on the inside of the harbor, the channel deepens to 13 fathoms.

You have 6 fathoms up to point of landing in the Straits of Joshua.

You will require 3 buoys on the bar, so that any vessel will be safe at any time with a pilot.

If you should require more detailed information you can call on me at any time and I will be ready at short notice.

N. Ohlson.

Captain of vessels sailing on the Gulf of
California.

The Gulf of California, Mexico.

April 15th. 1899.

Mr. A. K. Owen,

New York.

Dear Sir:

At your request, I sounded the Topolobampo bar, on leaving, finding the least water to be 20 feet at low tide. On entering pass one hundred yards south of the North buoy which leads fair into the channel. The South Buoy is in a bad position and should be either removed, or placed nearer the channel. As it now stands in front of the South bank, any one rounding said buoys to enter Topolobampo would run into shoal water. As buoys are very expensive articles I give you a word of advise as to preserving them. x x x x x x x x x x x

Yours truly,

C. T. Robinson,

Captain, Steamship "Altata"

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of

JAMES CAMPBELL, E.S.Q.

For 20 years the General Manager and Constructor for
the Central and Southern Pacific R.R.Co's.

"I arrived at Topolobampo on the 18th. of April. We had no difficulty in crossing the bar or entering the harbor, as the Captain knew the channel and harbor well, and never took down any sail until ready to drop anchor in the inner harbor.

"We crossed the bar at low tide, and although our vessel was of light draft, I had the captain take soundings before approaching and until we crossed the bar, and found three fathoms on the bar, which seemed to me only a distance of 300 feet, when we found deep water and did not sound again until we cast anchor in the inner harbor in four fathoms of water. The captain told me that there was another channel south of where we crossed the bar that had more water and that the largest ships could sail into the harbor at any time when the channel was marked by buoys; he also said that Captains, as a general rule, enter ports at high *tide* that the tides here rise from 4 to 6 feet and there would be no danger for the largest steamers to enter Topolobampo. The harbor is beautiful and extensive, and will give shelter to all the fleets of the Pacific Ocean."

"Topolobampo harbor is so situated that when opened by railway communication it will command all the traffic for over 100 miles, both north and south, along the coast, and directly back to the mountains 150 miles, where the mining interests center; and the terminus of the railroad will be the distributing point for the mining section on the west slope of the Sierra Madre. This includes Batopilas mining district."

Dear Friend,

I am very glad to hear that the rails for the Topolobampo Railroad have been shipped. The rock work at the Bay is nearly finished, and the contractor expects to have it all completed by the end of this month, or the beginning of next. The grade is practically finished from Topolobampo as far as Jecahui, and between that place and Fuerte about six kilometers have been complete so that between Topolobampo and Fuerte there is only about 20 kilometers of grading yet to be done. Everybody here expects to see this section in operation before many more weeks. An immense number of ties have been brought in to Fuerte and distributed along the grade as far as San Blas. More are being brought into Fuerte every day, and, from what I can learn, there are enough ready cut, or nearly enough, to lay the track from Topolobampo (62 miles) to Fuerte.

I note the clipping you enclose in regard to North Dakota with its death rate of 0.95 per thousand, being the healthiest portion of the United States. We can make a better showing than that. During the last ten years, with an average of Anglo-Saxon population of between three and four hundred, we have had only fifteen deaths, despite the fact that we have suffered more or less from lack of the conveniences and many of what are considered the necessities of life in more civilized communities, and that many invalids come here in order to regain their health; and while many of these realized their hopes, some succumbed to disease contracted in their former homes and thus increased the death rate of the settlement. A few days ago I had a talk with Nicholas Murphy, an old colonist who left here about six years ago and went to Guatemala. He remained there about two years and then went to look for a better location. He returned here a couple of weeks ago. He told me that since leaving Guatemala he had visited and sojourned

ed more or less in many places between Guatemala and the Rio Grande and Topolobampo, but could not find any place as desirable in all respect to live in as Topolobampo and vicinity. He is here now to stay.

(Signed) J.G. Dawkins .

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M E M O R A N D U M .

At the request of Col. Owen, herewith is a synopsis of a Report made by me of the projected R.R. and harbor of Topolobampo. I went over the line of road in May, 1901, and found that about 1/3 of the grading had been done between Puerto and the Port. There were no engineering difficulties to be encountered in construction as far as Agua Caliente de Naca, which is a distance of 103 miles and which traverses a country which could be made very rich from an agricultural stand point. The timber resources in the mountains are immense, and a number of mines and valuable prospects can furnish a large tonnage immediately. The town site on the Bay of Topolobampo is the keynote to the situation, as it is unquestionably on the best harbor on the Gulf of California. Topolobampo harbor is 18 miles long and has 21ft. of water above the bar at low tide. Vessels coming to the anchorage can throw their ramp plank on shore. The harbor is most beautiful, being surrounded by mountains and the climate is delightful and healthy. At Los Mochis, a few miles from the harbor, the American farmers raise fruit and vegetables of every description, and to perfection. In my opinion with a rail road and a line of steamers, Pacific City site will, in a few years, become one of the most prosperous points on the west coast of Mexico. I have never visited a more beautiful or more suitable point to establish a large city.

(Signed) J. Eschale Florence.

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Col. A.K. Owen,

New York,

Dear Sir:-

I consider there is no point uncovered to-day where it is so desirable to have a smelter erected at as Topolobampo. There is an immensely rich mining district contiguous from which to draw a supply of unusually rich ores. Have examined this district twice within the last eighteen months and reported in detail upon the advisability of a 200 ton smelter being erected. Will be pleased to meet your friends and confirm any detail they may desire

Sincerely Yours,

(Signed) J. Estelle Florence.

Hon. William K. Rogers says:- "All the information I have had since coming to Mexico corroborates the opinion we have been led to entertain with reference to the superior natural advantages of Topolobampo Bay for all the purposes and requirements of a large commercial seaport."

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"I have come back from Topolobampo- left the place very reluctantly indeed. It was a constant regret I did not have you with me at the harbor as I studied the lay of the ground and all its remarkable advantages disclosed themselves. No one I suppose, I can safely say, has ever given so much time to their examination short as it was.

"Topolobampo exceeds in every respect all the expectations I had. It will make the handsomest seaport in the world, as well as the most convenient for commercial uses. I have to take counsel of my soberest judgment when I talk about it. I don't want at this time of my life, to get notoriety for romancing. If you could put the Jersey Mountains on the Hudson Highlands close a-

always being cool enough to make more or less covering acceptable.

Captain Albert Von Metz, says:- "From El Fuerte to Zapotillo we rode through a veritable garden spot-tobacco, sugar cane, corn, and wheat fields giving the necessary proofs of the fertility of the soil. From Zapotillo to Topolobampo Harbor, a distance of 21 miles, we rode through the common mesquite groves, enjoying at the latter the embracing atmosphere and the refreshing sea breezes known to be constant in the vicinity.

"Words cannot describe the magnitude of this aspect. Upon its ample waters thousand of winged natives were enjoying nature in this quiet and majestic abode. Entirely surrounded by mountains of 600 to 1,000 feet high, we are not aware of our immediate proximity to the sea, neither of the extensive level city site which is extending eastward and northward at less than a half a mile from us. Before us lies a harbor ample enough to make an extensive commercial fleet enjoy the comforts of a good and safe anchorage; behind us, separated by a narrow range of hills lie the extensive plains where the city is to rise.

"The City site is admirably chosen. It will, however, be advisable to start the first improvements and buildings at one mile northeast from the commercial or business part, the country there being more elevated.

"After having convinced ourselves of the superiority of the harbor of Topolobampo, we examined the best location to be taken by a railroad, and having taken our notes about Topolobampo and its vicinity, we returned by coach to El Fuerte.

Mrs Ida Hogeland Dawkins says:- "I write to tell you of the importance of this port is attaining as a commercial point.

"Four hundred tons of sugar are to be shipped from Topolobampo on one steamer the middle of this month.

"The 'Carmen' is unloading 2,000 sacks at our pier this morning. The 'jenny' and the 'derrick' make pleasant music as I write. Twenty five dusky indians are sadly trotting under the weight of their loads as they carry them from the pier through the warehouse, which is already overflowing, to the rocks beyond.

"Some merchants of the Fuerte Valley have bought up the Crude sugar from the 'Constancia' and 'Florida' sugar mills and with that of 'La Aguilla', they are shipping it to San Francisco, California, as thus it will be duty free, and they will refine it there. The San Francisco steamer is too big for the Estero Buenaventura, so the 'Carmen' is bringing the sugar here, for seven cents a sack. I would think it cheaper to haul it here direct, with carts, than to load and unload and then to pay that sum. One load is to be stored to-day, and the other the next trip of the Carmen and they are both loaded direct from the 'Carmen' to the San Francisco steamer. They do not seem ^{to} doubt making connection. I see as the 'Carmen' is now two days late, having been detained a day up the Estero, on account of the tide, or shall I say the sand mudflat, into which it has to flounder every time it has to go up there. I think I told you of my going on the 'Carmen' one trip with Mrs. Lutton, and my astonishment of being dragged along regular brush wacking style to mangla brush and pulling through the mud for the last two hundred yards. I wonder a steamer ever goes up there, but then they will go anywhere if there is money in the trip. There is not much in these trips but the 'Carmen' owners want to do the carrying for La Aguilla ('Florida' has its own boats) and they will hammer those up there for the present, but Oh! how they all hate to go up there. No wonder you have always been enthusiastic about Topolobampo. You have seen Melano Blanco, Agiabampo

and Altata. Since I have seen them too, I realize more fully than before how superior Topolobampo is to any one of them, - to them all combined. This latter 'S'-Altata Channel - and 'Los Brazos Viejo' (2 1/2 fathoms) will be remembered as long as the name 'Altata' Nor will I forget that I saw Agibampo - a speck - six miles in the distance; and that the captain, all dignity, went ashore from his boat on an Indians back, at Mojano Blanco !!! Here, at Topolobampo, we stepped from the pier onto the biggest boat that can come in with 23 feet draft."

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Mrs. Sarah E. Wilber, says:- "American supremacy in the Philippines, the Laredos and Cuba cannot otherwise than have a most marked and valuable influence on your Concessions. It is the master stroke which makes your trans-continental railway the great, grand thoroughfare of civilization. As before it was great, it is now one of the greatest enterprises of the age."

"This is all so plain to see after the careful study we have made in the past of this great plan, that I must interrupt you a moment to let you know we see it and how enthusiastic we feel"

"Alvin, Lawrence and I are holding the fort at the bay. We have charge of the warehouse and pier. All persons here and at the farm are well. There will be tons of grapes on the farm. They are just getting ripe and are fine."

"The bay is beautiful and the weather lovely. There are a very few goats; of course, September is the ugly month, but that is only one of twelve."

"Alvin and Lawrence are so fascinated by the climate of Topolobampo that nothing of which I am aware of will make them say "yes" to going away."

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SELECTIONS FROM

"A TRIP THROUGH SONORA AND SINALOA."

by

JESSE R. GRANT.

"On the morning of the 27th. of October, 1886, we (Owen, Pressay and Grant) sailed into Topolobampo, and a noble harbor we found it. First comes an outer roadstead, 6 miles in diameter, and easy of access, and then passing through a range of mountains by a broad and deep channel, called the 'Straits of Joshua' we entered the inner harbor, larger than the roadstead and completely landlocked as the hills, mentioned, entirely shut out any view beyond.

"We landed bag and baggage on the lonely shores of the unused straits, and the 'Neptune' sailed away and was soon lost to view, leaving us to our devices and to the enjoyment of natural beauty combined with solitude like the first day of creation. Our devices were perforce very simple; for some red tape of the custom people of Nogales, had resulted in our well selected camp equipage being left behind, and so we were thrown on the honest miners outfit of blanket, tin cup, and frying pan. However, there is much happiness, to a philosophical man, to be got out of such simplicities. A blanket, at times, is a thing dear to a man, and a frying pan a luxury.

"What a factor in life is climate. There we were in a perfectly healthy country late in October, and yet, in this heavenly west coast temperature, a piece of old canvas laid over convenient eacti, was all that we required to ward off the sun by day and the dew by night. I confess it is a puzzle to me to hear the constant groans of the north about overcrowding and then to visit a country where land is sold by the square league as a unit, and where artificial heat is eliminated from the life equation. As

Napoleons Polish Guardsman remarked of Spain, so of Mexico: 'A man can live better as a tramp here, then by hard work in my country'

"This bay of Topolobampo is alive with fish; red snapper jumped continually, predatory porpoises rolled along and one saw everywhere the dorsal fin of the shark cutting the smooth water as its owner cruised about strictly attentive to business. Sea turtles too, are found in the proper season. Indians, from over the neighboring mountains, occasionally visited the bay to spear fish; but except for such transient invaders, the natives of the sea held undisputed possession of these waters. I have no doubt, however, that when civilization comes along here to muddy the water destroy the scenery, and ruin the aborigines there will be large fisheries on this coast, and that the sweet soft air will be odorous with the reek of fish oil establishments. It does seem strange that a harbor like this Topolobampo should have remained a solitude; for Topolobampo has a good back country, the harbor is commodious, easy of access and landlocked, and carries 25 feet of water close to the shores; perhaps, however, these are not considered requisite, or useful in a Mexican port. Judging by Agiabampo, the seaport of this region, where vessels have to lie off several miles, and all the freight, I understand, is lightered as to near the beaches the boat can go at high tide, where the heavy part of the cargo, - such as machinery - is lugged overboard to await low water and yokes of oxen to draw it hence. Several days of this delightful solitude were sufficient, so two of us (Owen and Grant) procuring horses and pack mules, from some near cattle herders started on a trip to Fuerte, leaving our companion (Pressey) to guard alone the bay."

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TOPOLOBAMPO HARBOR,
SINALOA, MEXICO.

REPORTED AFTER PERSONAL
investigation by

Hon. Wm. K. Rogers.

Mr. Noble E. Dawson.

Mr. J. E. Florance, M. E.

Mr. Jesse R. Grant.

Comd. Wm. T. Truxton, U. S. N.

Mr. James Campbell.

Mr. George W. Simmons, Jr.

Captain Von Motz.

Mr. E. A. H. Tays, U. E.

and others.

T O P O L O B A M P O

"Down on the Coast of Sinaloa is the splendid natural harbor of Topolobampo; and if a railroad does not reach that port reasonably soon, I have authority for saying that it will be through no fault of Diaz. Indeed, among his specific dreams for the general uplifting of his nation, one of the dearest is to thwart that astounding geography - so well defined by Humbolt - which splits Mexico in twain from top to bottom."

"The Awakening of a Nation", Page 80, by

Charles F. Lumis."

November 11, 1901.

Mochis, Sinaloa, Mexico,

Mr. A. K. Owen,

Dear Friend:-

I am very glad to hear that the rails for the Topolobampo Railroad have been shipped. The rock work at the bay is nearly finished, the contractor expects to have it all completed by the end of this month or the beginning of next month. The grade is practically finished from Topolobampo as far as Jecahui and between that place and Fuerte about six kilometers have been completed, so that between Topolobampo and Fuerte there is only about twenty kilometers of grading yet to be done. Everybody there expects to see this section in operation before spring. An immense number of ties have been brought into Fuerte and distributed along the grade as far as San Blas. More are being brought into Fuerte every day and what I can learn there are enough ready, out, or nearly enough, to lay the track from Topolobampo to Fuerte.

I note the clipping you enclose in regard to North Dakota with its death rate of 6.95 per thousand, being the healthiest portion of the United States. We can make a better showing than that. During the last ten years, with an average Anglo-Saxon population of between three and four hundred, we have had only fifteen deaths, despite the fact that we have always suffered more or less for lack of the conveniences and many of what are considered the necessaries of life in more civilized communities and that many invalids come here hoping to regain their health, and while many of these realized their hopes, some succumbed to diseases

contracted in their former homes, and thus increased the death rate of the colony. A few days ago I had a talk with Nicholas Murphy, an old colonist who left here about six years ago, and went to Guatemala. He remained there about two years and then went to look for a better location. He returned here a couple of weeks ago. He told me that since leaving Guatemala he has visited and sojourned more or less in many places between Guatemala and the Rio Grande and Topolobampo, but could not find any place as desirable in all respects to live in as Topolobampo and vicinity. He is here now to stay.

(Signed) J. G. Dawkins.

M E M O R A N D U M .

At the request of Col. Owen, herewith is a synopsis of a report made by me of the projected R.R. and harbor of Topolobampo. I went over the line of road in May, 1901, and found that about 1/3 of the grading had been done between Fuerte and the port. There were no engineering difficulties to be encountered in construction as far as Agua Caliente de Baon, which is a distance of 103 miles and which traverses a country which could be made very rich from an agricultural standpoint. The timber resources are immense, and a number of mines and valuable prospects can furnish a large tonnage immediately. The town on the Bay of Topolobampo is the keynote to the situation, as it is unquestionably the best harbor on the gulf of California. Topolobampo harbor is 18 miles long and had 21 ft. of water over the bar at low tide, and 25 to 27 ft. at high tide. vessels coming to the

anchorage can throw their gang plank on shore. The harbor is most beautiful, being surrounded by mountains and the climate is delightful and healthy. At Los Mochis a few miles from the harbor, the American farmers there raise fruit and vegetables of every description, and to perfection. In my opinion, with a rail road and a line of steamers, Pacific City site will in a few years become one of the most prosperous points on the west coast of Mexico. I have never visited a more beautiful, or more suitable point to establish a large city.

(signed) J. ESDAILE FLORANCE.

December 7th, 1901.

Col. A. K. Owen,
New York.

Dear Sir:-

I consider there is no point uncovered to-day where it is so desirable to have a smelter erected at as Topolobampo. There is an immensely rich district contiguous from which to draw a supply of unusually rich ores. Have examined this district twice within the past eighteen months and reported in detail upon the advisability of a two hundred ton smelter being erected. Will be glad to meet your friends and confirm any details they may desire.

Sincerely yours,

(Signed) J. Esdaille Florance.

T O P O L O B A M P O.

"Is situated in the State of Sinaloa on the Gulf of California and midway between Guaymas and Mazatlan. Captain Preble, U. S. N. and others who have examined it, tell me, that it is easy of access, a safe and secure harbor and can be entered by vessels drawing 20 feet of water; and, in my opinion, its location, good anchorage, and other advantages indicate the right place for the most important City on the West Coast of Mexico."

David Turner, U. S. Consul,
La Paz, Lower California.

William H. Seward, said:-

"The Pacific Ocean, its shores, its islands and the vast region beyond will become the chief theatre of the events in the world."

Robert Howe Bancroft, author of the "New Pacific," says:- "A dozen lines of steamships now cross the Pacific between America and Asia where for two and half centuries a single galleon made its slow and clumsy way forth and back from Acapulco to Manila once a year."

The commerce of the Pacific Ocean amounts now to \$5,000,000,000 per annum. "The New South" has a gateway to the "New Pacific" at Topolobampo; and this harbor, by virtue of its immense size and the richness and diversity and quantity of the resources of its immediate back country

coupled with the facts that it has the most enjoyable of climates, both summer and winter, and is nearer to Kansas City, Chicago, St. Paul, St. Louis, Quebec, New York, and New Orleans than any other harbor on the Pacific Ocean, stamps Topolobampo as the future greatest mart for North America, Asia, and Australasia; and here must rise the greatest Metropolis that has ever catered to the South Sea trade.

E. A. H. Tays, C. E. says:- "All the products exported and imported into Southern Sonora and Northern Sinaloa are bound to find an entrance and exit through Topolobampo. This harbor is destined to become the chief port of the Pacific Coast of Mexico. I venture to say that before the end of the present decade there will be at least three railroads commencing or terminating at Topolobampo. The possibilities of this section of country are beyond conception. Once the modern civilizer — The Iron Horse — strikes its hoof on this soil, the change will be magical."

Hon. William K. Rogers, says:- "All the information I have had since coming to Mexico corroborates the opinion we have been led to entertain with reference to the superior natural advantages of Topolobampo bay for all the purposes and requirements of a large commercial seaport."

"I have come back from Topolobampo - left the place very reluctantly indeed. It was a constant regret I did

not have you with me at the harbor as I studied the lay of the ground and all its remarkable advantages disclosed themselves. No one I suppose, I can safely say, has ever given so much time before to their examination, short as it was." x x x x x x x x x x

"Topolobampo exceeds in every respect all the expectations I had. It will make the handsomest sea port in the world, as well as the most convenient for commercial uses. I have to take counsel of my soberest judgment when I talk about it. I don't want at this time of my life to get notoriety for romancing. If you could put the Jersey Mountains, or the Hudson Highlands close around New York, with broad openings several thousand acres in area in every different direction between their slopes, and seven Chicago rivers through these level lands, winding for miles through them and around the base of the hills that make on their opposite sides the harbor bluffs, you would have a picture of the City which can be made at this splendid harbor, as time goes on. You must add then some three millions or more of land, a level spread of as choice soil, every acre of it, as was ever turned by the plow, and a climate which for eight months every year is nothing less than perfect. With the refreshing rains which come for the four remaining months, in the summer heat, I don't see why anything else should be said of it. x x x x

"Topolobampo Harbor more than justifies what has been said of it. It is one of the great harbors of the world, and is as certainly destined to be the site of an

important commercial and manufacturing seaport, as the broad and beautiful valley of this river and the Sierras at its source will be the theatre of a most prosperous development of agricultural and mineral industry."

Henry R. Holbrook, Civil Engineer, says:- "The country drained by the Rio Fuerte is one of the richest mining districts in Mexico, and when it is developed will furnish a large and lucrative business for a railroad."

Noble E. Dawson, says:- "I will not tire you with a detailed description of the magnificent Fuerte Valley, or with speculations as to its immense agricultural possibilities. I have visited the valley of Mexico, the regions watered by the lower Rio Grande, and other portions of the Republic, and, with such opportunities for forming an opinion, I freely express the view that Sinaloa is the natural, though yet, undeveloped garden State of the Republic, while the Fuerte valley is the garden spot of Sinaloa."

x x x x x x

"In respect to climate, as I was there in the hottest season of the year, a word may not be out of place. The days were uniformly quite warm, but again and again I rode under a noonday sun, not only without serious suffering, but without fear of serious consequences. In fact, I believe sun-strokes are unknown there. Sleep at night was never interfered with by heat, the nights always being cool enough to make more or less covering acceptable."

Capt. Albert Von Motz, says:-

"From El Fuerte to

Zapotillo we rode through a veritable garden spot - tobacco, sugar cane, corn, and wheat fields giving the necessary proofs of the fertility of the soil. From Zapotillo to Topolobampo Harbor, a distance of 31 miles, we rode through the common mesquite groves, enjoying at the latter the bracing atmosphere and the refreshing sea-breezes known to be constant in the vicinity.

"Words cannot describe the magnitude of this seaport. Upon its ample waters thousands of winged natives were enjoying nature in this quiet and majestic abode. Entirely surrounded by mountains of 600 to 1,000 feet high, we are not aware of our immediate proximity to the sea, neither of the extensive level city site which is extending eastward and northward at less than half a mile from us. Before us lies a harbor ample enough to make an extensive commercial fleet enjoy the comforts of a good and safe anchorage; behind us, separated by a narrow range of hills, lie the extensive plains where the city is to rise." x x x xxxx x x x

"The city site is admirably chosen. It will, however, be advisable to start the first improvements and buildings at one mile northeast from the commercial or business part, the country there being more elevated."

"After having convinced ourselves of the superiority of the harbor of Topolobampo we examined the best location to be taken by a railroad, and having taken our notes about Topolobampo and its vicinity, we returned, by coach, to El Fuerte."

Mrs. Ida Hogeland Dawkins, says:- "I write to tell you of the importance this port is attaining as a commercial point.

"Four hundred tons of sugar are to be shipped from Topolobampo on one steamer the middle of this month.

"The 'Carmen' is unloading 2,000 sacks at our pier this morning. The 'donkey' and the 'derrick' make pleasant music as I write. Twenty-five dusky Indians are fairly trotting under the weight of their loads as they carry them from the pier through the warehouse, which is already over-flowing, to the rocks beyond.

"Some merchants of the Fuerte Valley have bought up the crude sugar from the 'Constancia' and 'Florida' sugar mills, with that of La Aguila, they are shipping to San Francisco, California, as thus it will be duty free, and they will refine it there. The San Francisco steamer is too big for the estero 'Buenventura', so the 'Carmen' is bringing the sugar here, for seven cents a sack. I would think it cheaper to haul it here direct, with carts, than to load and unload and then pay that sum. One load is to be stored to-day, and another the next trip of the 'Carmen' and they both are loaded direct from the 'Carmen' on to the San Francisco steamer. They do not seem to doubt making connection. I do, as the 'Carmen' is now two days late, having been detained a day up the estero, on account of the tide, or, shall I say the sand mud-flat, into which it has to "flounder" every time it goes up there. I think I told you of my going on the 'Carmen' one trip, with

Mrs. Lutton, and my astonishment at being dragged along regular brush-whacking-tying to mangle brush and pulling through the mud for the last two hundred yards. I wonder a steamer ever goes up there, but then they will go anywhere if there is money in the trip. There is not much in these trips, but the Carmen owners want to do the carrying for La Aguila (Florida has its own boats), and they will humor those ~~up~~ up there for the present. But, oh: how they all hate to go up there. No wonder you have always been enthusiastic about Topolobampo. You have seen Medano Blanco, Agiabampo, and Altata. Since I have seen them too, I realize more fully than before how superior Topolobampo is to any one of them - to them all combined. That letter "S" - the Altata Channel - and "dos brazos Medio" (2 1/2 fathoms) will be remembered as long as the name "Altata." Nor will I forget that I saw Agiabampo - a speck - six miles in the distance; and that the captain, all dignity, went ashore from his little boat, on an Indian's back, at Medano Blanco!!! Here, at Topolobampo we stepped from the pier on to the biggest boat that can come in with 23 feet draft."

Mrs Sara E. Wilber says:- "American supremacy in the Phillipines, the Ladrones and Cuba cannot otherwise than have a most marked and valuable influence on your concessions. It is the master-stroke which makes your trans-continental railway the great, grand thoroughfare of

civilization. As before it was great, it is now one of the grandest schemes of the age.

"This is all so plain to see after the careful study we have made in the past of this great plan, that I must interrupt you a moment to let you know we see it and how enthusiastic we feel.

"Alvin, Lawrence and I are holding the fort at the bay. We have charged of the warehouse and pier.

"All persons here and at the farm are well.

There will be tons of grapes on the farm. They are just getting ripe and are fine." x x x x x x x

"The bay is beautiful, and the weather lovely. There are very few gnats - of course September is the ugly month, but that is only one of twelve.

"Alvin and Lawrence are so fascinated by the climate of "Topo" that nothing of which I am aware will make them say yes to going away."

T O P O L O B A M P O

Is the most picturesque, largest and best mountain-locked harbor in North America. It contains 54 square miles of water, 12 1/2 of which are from 30 to 90 feet deep. This is more anchorage than there is in front of New York, Brooklyn, Jersey City, and Harlem combined. The depth over the bar is 20 feet at low water; and there are from 5 to 6 feet rise of tide.

Topolobampo is situated in Sinaloa, Mexico, on the Gulf of California, in latitude 25°, 32' North, and is on a line with New Orleans, Louisiana, and Canton, China. It is midway between Mazatlan, and Guaymas, and about 200 miles from both; and it is nearer to every city in the United States and Canada, east of the Mississippi and St. Lawrence, than any other point on the Pacific Coast. New Orleans will save 1,200 miles in getting to the Pacific Ocean at Topolobampo, rather than going to San Francisco; New York 800; and Chicago 500 miles. Liverpool can send freights and passengers, via New York and Topolobampo, to Australia, Hawaii, Manila, and Japan 200 miles shorter than, via New York and San Francisco. This harbor once opened as a port to the world and connected by railway lines with Texas will make a new and manufacturing South, and will change, in part, the commercial routes of the world.

Topolobampo has the most vigorous, wholesome, and enjoyable all-year-round climate of any locality on our continent. It has the richest and most varied back country natural resources of any ~~country~~ ^{harbor} in the world; and upon its shores is sure to rise the Metropolis of the Pacific Coast of North America.

John D. Long,
Secretary.

NAVY DEPARTMENT,

Washington,

February 13, 1902.

Dear Sir:

Replying to your letter of February 8th, requesting a copy of the report made by Commodore Truxtun of the Port of Topolebampo in the year 1869. I take pleasure in forwarding herewith a copy of extract taken from the private journal kept by Commander William T. Truxtun, commanding the U. S. Sloop of War "JAMESTOWN", off Topolebampo, Mexico, in March 1869, which, it is presumed, is the report you desire.

Very respectfully,

Chas. ~~Parsons~~ *H. Darling*
Acting Secretary.

Hon.

United States Senate,

Washington, D. C.

Copy -R

(X)

Extract from private journal kept by
Commander Wm. T. Bruxtun, Commanding the
U. S. Sloop of War "Jamestown".

"Off Topolobampo, Mexico,
March 1869.

On the 21st was informed by a native that the ship was off
Lehuguis, the mouth of the river 'Home'; ^(Fuerte) shifted our anchor-
age to Lat. 25 33' North, Long. (chro.) 109 21' 27" West,
in 10 fathoms water, hard grey sand.

The entrance to this harbor and the inland sea of
'San Carlos' is in Latitude 25 32' North, Longitude 109 14'
25" West, between two sand banks covered at high, and awash
at low water, and through which three and one half (3-1/2)
fathoms can be safely carried at low water.

The land of Topolobampo, and the Island of San ~~Ignacio~~
Ignacio, (between which are the Straits of Topolobampo, and
entrance to the Bay of San Carlos), is high and easily
distinguishable.

With the Farallone San Ignacio (in Lat. 25 27' N.,
Long. 109 27' W.) bearing S. W. by S. (Mag.) you have a fair
view up Topolobampo Straits.

With the Farallone San Ignacio bearing S. 54-1/2 W.
(Mag.), the entrance between the sand banks bears N. 54-1/2 E
(mag.),

You can then stand in on that course (N. 54-1/2 E.)
with safety, till you see the breakers on either side of
the smooth water of the channel; the soundings decrease
regularly and gradually, bottom smooth hard sand, free of
all dangers.

When on this line the Straits of Topolobampo will be

(2)

shut in, and you must be careful not to be misled by an apparent opening a little to the northward of the N.54-1/2 E. and S. 54-1/2 W. line given above.

For the present, and till a more thorough examination of the approaches are made, it will be well to keep about half way between the "Farallone" and the Main-land, and between the West and S.S.W. points of the compass, before standing in too close to the land.

The set of the tide, on and outside the sand banks, are not determined; they are quite strong---apparent rise and fall (7) seven feet.

The high lands of Topolobampo are faced with (but separated by a narrow strip of water from) a bright yellow sand beach, which stretches away to the Nd. and Wd., and is lost in the distance.

It makes a good mark for the North side of the entrance as you approach from the West D., and in the afternoon shows well. We carries (4) four fathoms to within (300) three hundred feet of this beach.

The water in Topolobampo harbor and Straits varies from (6) six to (15) fifteen fathoms, till well in San Carlos Bay, when it gradually shoals.

Further investigations, however, may develop good channels through this magnificent inland sea.

In Topolobampo fair drinking water may be obtained by sinking wells in the sand on Conchal point. Wood is not to be had, except the thin growth of chaparral that covers the ~~low~~^{high} hills of the vicinity.

(3)

The anchorage outside is perfectly safe, as a ship could ~~be~~ always lay off shore with a S.E. or S.W. wind, should it begin to ~~blow~~ blow.

Inside Topolobampo vessels are entirely protected from the sea, while only S.W. and N.W. winds would be felt; in San Carlos vessels would be entirely land-locked. In fact, for safety, no more secure anchorage is to be found, while with the aid of two or three buoys, access to it could be made perfectly simple, more so than to most of the harbors on the coast of the United States, south of Boston.

There are many rivers emptying into the Gulf of California not laid down on the charts. I am satisfied also that other good harbors will be found, when this country, which for hundreds of years has suffered from the curse of misrule, shall pass under the control of an enterprising people.

Inray's chart — probably the best at present published, — is exceedingly incorrect; in fact, the geography of the North West Passage is better known than that of this eastern shore of the Gulf of California!

4
Topolobampo Harbor,
Sinaloa, Mexico.

Reported after personal
investigations by

Hon. Wm. K. Rogers
Mr. Jesse R. Grant
Mr. Noble E. Dawson

Capt. Von Motz
and others.

Commodore Wm. J. Irwin
U.S.N.

James Campbell

REPORT OF
S. E. BRETHERTON, EXPERT METALLURGIST OF DENVER, COLORADO,
Upon the Conditions of Smelting at Cahon, on the River Fuerte,
in the State of Sinaloa, Mexico.

XXXXX

Dear Sir:

Following your instructions, I have visited your property in the State of Sinaloa, Mexico, near Aguas Caliente de Baca, on the Fuerte River.

I examined several sites for a smelting plant, along said river. I kept in view the fact that you would probably want, in the future, to enlarge your plant as the country develops, and made a selection of an ideal site for a suitable smelter, about five miles up the river above William V. Lamphar's residence on the Fuerte River. The land is on the upper edge of Mr. Lamphar's property, who, I understand, is perfectly willing to donate it to your company.

The water supply from the Fuerte River is abundant and unlimited.

The fuel question is satisfactory for smelting copper ore containing sulphur, as by the use of hot blast we can get along with the excellent hard and soft woods which grow abundantly in that district, for the reduction of copper matte. Should we find it necessary to use some coke in the re-smelting of the copper matte into pig copper, it would require only a small amount of coke for that purpose.

There is also plenty of lime rock within a distance of four or five miles from the proposed smelter site, and judging by the character of the ore I saw at Choix, iron ore for fluxing purposes will not be necessary; but in any event, there is an abundance of iron flux carrying some values (gold and silver) in the Choix District.

I understand that there would be tributary, as ore shippers to the smelter to be located at above place, the District of Choix, about twelve miles away, which I visited and found to be producing a very desirable smelting ore containing copper, gold and silver of a sulphide character. They are now shipping these ores by land to Agiabampo, thence by steamer to Guaymas, and from there by rail to Nogales and El Paso, and back again into Mexico down to Agua Calientes, to a smelter formerly owned and operated by M. Gugenheim's Sons and now by The American Smelting and Refining Company. They had about 100 tons of ore at the agency in the town of Choix in different piles and classes, so that it gave me a fair opportunity to judge its character.

The owner of one mine near Choix claims that he is willing to guarantee a production of one hundred tons a day until one hundred thousand tons of ore have been shipped, and that he will forfeit \$5 per ton for every ton of ore he fails to deliver at his mines.

In addition to the Choix District, there is the District of La Junta, about twenty-five miles away from the smelter site; the District of Chinopas or White Chief, about forty miles distant; the District of Yecorati, about seventy miles distant; the District of Bachuerichi, sixty miles distant, and another district on that side of the mountains about half way to Batopilas, which they claim produces considerable ore.

The District of Alamos produces ore and concentrates; in fact, I

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found there a very desirable copper smelting ore; but as Alamos is about the same distance from our smelter site as it is from Agiabampo, we would not have such a great advantage on these ores as we would have on the ores shipped from the other districts just named.

My idea would be to start in at present with a smelter of a moderate capacity and enlarge it whenever the railroad, which is now being built, is completed.

Attached will be found an approximate list of machinery suitable for reducing the ores, re-smelting the matte, and producing a pig copper which will contain the gold and silver.

I should estimate that you can erect and put in operation a complete plant that would smelt 150 tons of ore per day of twenty-four hours at a maximum cost of \$75,000.

The office and machinery buildings, as well as the dust-chamber and smoke-stack, can be built at low cost of Mexican brick, made on the ground. The Smelter Building, Sampling Room and Roaster Building can all be built of timber which you can furnish from your own sawmill.

I would suggest that all these buildings be covered with iron roofing, well painted, and you will then have a complete plant suitable for smelting the ore of these districts.

Yours faithfully,

S. E. Bretherton.

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Yours faithfully,

S. E. Bretherton.

Report on Sinaloa

By Noble E. Dawson, Esq.

In reply to your recent inquiry, I have to say that during my late May and June trip through the northern States of Mexico I visited and devoted some days to an examination of the harbor of Topolobampo and the adjacent country. I also travelled up the Fuerte to the city from which the river and valley derive their name, and thence southwardly, passing through the cities of Sinaloa, Mecorito, Culiacan, &c.

As you are doubtless aware, the dry season, in its effects upon the agricultural and forest growths of that country, corresponds in a measure to our northern winter. My visit to Topolobampo occurred in the dead of that season, (May, '83) and I could not but expect the harbor and its surroundings to present a bleak and barren appearance. In short I expected little in the way of scenic beauty, and was, consequently, very agreeably surprised when our Indian canoe shot from the mouth of the estero, upon whose clear waters we had embarked, and presented suddenly to our view the whole outer bay. The sunset scene of that day I shall never forget, and will not attempt to describe. Its beauty could have been surpassed only by that of the following sunrise, which found us entering the Straits of Joshua, a brisk pull through which brought us upon the inner bay. With the added embellishment of abundant verdure nothing could be wanting in point of attractiveness. What is of vastly more importance to the commercial world, however, we

had here all the natural conditions and requisites of a first class harbor. I base this opinion not only upon personal examination, but also upon the results of diligent inquiry among seamen who have personal knowledge of its capacity, depth, accessibility, &c.

We found oysters of excellent quality in the outer bay, and abundance of turtles, fish, and sea-fowl in both. The water is very clear, and fish can be seen swimming about at considerable depths. I visited the city site, but in lieu of a description of my own thereof will refer to page 56 of Mr. Anderson's recent pamphlet, "The American and Mexican Pacific Railway," as presenting views substantially coinciding with my own, based on such examination as I was enabled to make.

I will not tire you with a detailed description of the magnificent Fuerte valley, or with speculations as to its immense agricultural possibilities. I have visited the valley of Mexico, the regions watered by the Lower Rio Grande, and other portions of the Republic, and, with such opportunities for forming an opinion, I freely express the view that Sinaloa is the natural, though as yet undeveloped, Garden State of the Republic, while the Fuerte valley is the garden spot of Sinaloa.

The supply of fuel-timber and hard-grained woods is practically inexhaustible in the State. I saw a schooner, a steamer (the "Karagoza"), and a large German ship, all loading at the same time with logwood at Altata.

This leads me to mention a fact which I gathered from the

captain of the steamer "Estado de Sonora," plying between Manzanillo and Guaymas, and touching at San Blas, Mazatlan, Altata, and La Paz, which is, that this steamer's net profits average not less than ten thousand dollars (\$2,600 of which comes from subsidy for carrying the Mexican mail) each round trip, and she makes two such trips per month. She is a small vessel, of less than 500 tons register. In addition to the traffic of this vessel, the "City of Mexico," a large steamer, makes monthly trips, touching at Mazatlan, La Paz, and Guaymas. The steamer Altata makes frequent trips (about weekly, I think) between Mazatlan and Agaibampo, touching at Altata. The steamer "Zaragoza" is also in these waters, besides a great number of sailing vessels. If all of them reap profits corresponding with those of the "Sonora," it furnishes, it seems to me a very encouraging prospect for your company in respect to local traffic from the outset.

In respect to climate, as I was there in the hottest season of the year, a word may not be out of place. The days were uniformly quite warm, but again and again I rode under a noonday sun, not only without serious suffering, but without fear of serious consequences. In fact, I believe sun-strokes are unknown there. Sleep at night was never interfered with by heat, the nights always being cool enough to make more or less covering acceptable.

I made inquiries as to the mineral resources of the country and am convinced that the northern States of Mexico are seamed

with a mineral wealth which will yet throw California and Colorado far into the shade; but candor compels me to express a conviction that before that time comes many disappointments are likely to be suffered by investors in mining stocks, and much discredit cast upon the mining industries, through the manipulations of unscrupulous agents and speculators who buy up or "denounce" inferior mines, and put them on the market under unwarranted representations as to their value. Owners of the best mines are not always anxious to get rid of them. The well-known results achieved at Batopilas, under the skilful management of Hon. A. R. Shepherd, is an illustration of what is possible at other places--but I could not learn of many places where operations were being carried on in this careful and systematic way.

While in the capital of Sinaloa I made inquiries of the authorities in reference to population, and was furnished the latest official report, printed last year. From this I find your engineers, in preparing the map which you have recently published, have greatly underestimated the population of some of the towns and cities along your projected road. For instance, Sinaloa City is given 5,000 inhabitants on the map, while the actual population according to this report is 9,993. Mecorito is estimated at 2,000; should be 3,961. Mechicahui 500; should be 2,071. The underestimates probably arose from the omission of outlying and dependent hamlets or suburbs in the estimates of the engineers, and their praiseworthy desire to be entirely within the bounds of truth.

A fact which I deem worth mentioning as full of good omen for the early and rapid advancement of the State in point of intelligence, enterprise, and wealth, is that a law has recently been enacted providing free schools, with compulsory attendance of all the children in the state.

I had nearly forgotten to mention what was really one of the most marked features of our ride up the Fuerte Valley--the wonderful interest in your proposed railroad felt by the people and their great anxiety to see the work commenced. Our visit to the bay gave rise to the report, which spread like wild-fire, that the company's engineers had arrived to begin work upon the railroad. The disappointment of the inhabitants was painfully apparent, as we were compelled at all points along the valley to correct the report which had preceded us.

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COPY.

THE REPORT OF ENGINEER ELTZ, OF FRANCE.

THE AMERICAN AND MEXICAN PACIFIC RAILWAY.

The object of the vast enterprise which bears this title is to open for the produce of the Southern States of America, Mississippi, Louisiana, and Texas a new outlet on the Pacific Ocean, in order to reach directly the immense markets of Australia, New Zealand, the English and Dutch Indian possessions, China, and Cochin China.

The choice of the main line from the starting point in the Mississippi Valley towards Shreveport, and of the port to be created on the Pacific, has been inspired by this great thought, and this choice has been so fortunate that, while at first they were only seeking for a line of shorter transit than those existing, they have besides found a splendid international line, which will be the mother artery of the international network joining between them the rich southern section of the United States and the Northern States of Mexico, which are as large as kingdoms.

But the advantages of this admirable project do not stop here. To its titles of international line and line of transit it adds another title more modest, but also to be envied, the one of "The Industrial Railway", with the greatest advantages in the world.

That the produce or the travelers starting from New York, New Orleans, and from the Atlantic shore, as also from Texas, will go by the new line to attain the new port of Gonzales (now Topolobampo) is the natural consequence of the respective positions of these States

and of that port. This last is nearer to them than any other port on the Pacific, and the maps furnish on this point indisputable arguments, as the reduction of the transit is plainly seen.

As an international line the chosen direction is very good, as it is a connection between the projected lines of Mexico and all those which are being built on both sides of the boundary in the north of Mexico, as well as in the southern part of the United States; but as it is the grand artery for transit it must naturally attract all the transportation from distant points, either of travellers or of merchandise, which will be carried by it cheaply, more rapidly, and without trans-shipment. But it is above all in assuring to this fine project an industrial and commercial local traffic that the practical genius of the American promoters has shown itself.

The line, in leaving the United States, where it will occupy the first rank by reason of the great interest attached to it, enters immediately among all sorts of wealth. In fact, it finds in the Rio Grande valley immense herds of cattle, horses, and mines of coal on both shores.

As soon as the Rio Grande (limit of both States) is passed the railway enters by one of the affluents of the Rio Salado, in the Sierra de San Marcos, rich in metals. In the neighborhood of Santa Rosa mines of coal, iron, copper, and above all, of silver are found. All the affluents of the Rio Grande, which are numerous, can be considered as industrial feeders or branches, which will come and bring their quota to the principal artery.

Then as soon as the boundary has been passed one can count upon a network of railroads which will bring from all the products of the Sierra de San Marcos, of Santa Rosa, and Del Burro immense quantities of minerals.

It would thus be easy for the company grantee of the M. and A. Pacific Railway to make sure on the start of the operations which, in my opinion, ought to commence on the Mexican Territory at both ends of the grand central artery; easy to make sure, I say, of the easy and fruitful exploitation of the finest mining region one can imagine.

The 200 kilometres which separate the Rio Grande from the Sierra de San Marcos will not cost much, and one will have a first capital of from 20 to 30 millions of francs (4 to 6 millions dollars) established the first basis of the company.

The actual American network extends itself already over the Rio Grande; it will then suffice to connect with it provisionally to have a fruitful exploitation at the doors of the United States.

One knows with what prodigious rapidity enterprises of this kind are developed on the American continent under the care of this enterprising people, and in the good conditions presented at the starting point of the grand artery on the Mexican Territory. But these Sierras, full of precious mines and of mineral coal, which seem to have been deposited there to be well treated, are equally rich in forest and cereals.

All the elements of industrial and commercial prosperity are accumulated in that country, and it depends entirely upon the company

to take possession of them.

In leaving the Sierra de San Marcos the line traverses a vast plain, passes at the foot of the mountains of the Sierra Mojada, which contain mines of silver, iron, and lead, passes then near the Saloma lake, (a genuine salt mine,) crosses the cotton region of Chihuahua to attain the Rio Florida, which comes from the Sierra Madre. It is the grand Cordilleras which must be passed to arrive at Topolcampa on the Pacific.

In these vast plains the road will cost little. It will not be the same in the crossing of the Cordilleras, which is of a length of about 200 kilometres.

On the other side of the Cordilleras from Chicurato the field is less undulating; that side composed of ridges of small elevation descends regularly by slopes and terraces to the shore of the Pacific.

We find also at this other end of the grand artery a situation as favorable to the interest of the company as the agricultural and mining centre of the shores of the Rio Grande.

The Cordilleras (Sierra Madre) abound in mines of lead, copper, silver and gold. They are covered with all sorts of wood, from the pine and oak to the precious wood; wheat is also cultivated in certain places.

From the foot of the mountains to the shores of the Pacific one meets a diversity of cultivation, cereals, cotton, coffee, sugar, rice; mines of coal are found not far from Sinaloa, mines of iron towards Culiacan, mines of silver near Alamos. All of these natural riches are from place to place embraced within 400 kilometres, starting from the

port of Gonzalez, (now Topolobampo.)

The company can do here what it will certainly do at the Rio Grande; it will by some improvement enable the bay of Topolobampo to receive large vessels which will be easy and inexpensive; it will establish there offices and warehouses; then it will build as rapidly as possible the sections which unite the Sierra Madre, and that will not be expensive. This done, the company is in possession of a second marvellous partial network; it will enter in the Sierra Madre by industrial sections which the mining interest will hurriedly build; it will push the branches toward Alamos of one part, and toward Mazatlan on the other, which lines will be established in very advantageous conditions of construction and traffic, and which will assure to the Company all the commercial movement of the most rich and populated part of Sinaloa. So then, even before the two ends of the road would have been connected, the company will have two fine and rich lines, one by the Pacific, the other at the boundary of the United States, and the expense of these two (2) centres of activity will not exceed 100 millions of francs.

Then on the conditions that we have just indicated these two networks can be favorably compared to the most successful railroad lines of Europe and the United States. The gross receipts per kilometre before the total completion of the trunk line will not be inferior to 36,000 francs, (\$7,200;) it is 1/3 more than the produce of the West Algerian, which has a less advantageous tariff, and in a country with a situation which has not 1/6 of the riches of the neighborhood of Rio Grande and of the Sierra Madre, and also of the rich maritime slope of the States of Sinaloa. The exploitation in consequence of the immense

quantity of wood for fuel, and at the low price at which the company can obtain the coal, will not be expensive in the first period, especially when the service will be almost entirely absorbed by the transportation of heavy merchandises, coal, minerals, cereals, colonial produce, timber &c. One can value it at 35 per cent. of the gross receipts, leaving a net profit of 23,700 francs per kilometre.

So then, one thing which is seldom seen, the critical period, the period of construction, will be here a period of prosperity which will establish the credit of the Company on a broad and solid basis, and will enable it to overcome all the difficulties. When the entire net-work will be completed on the American as well as on the Mexican territory, the traffic will be quadrupled, as the expansion of these industrial and agricultural riches will come in addition to the international movement and to a colossal transit movement.

The company so well favored, as already explained, has a great many other sources of profitable earnings at its disposal. Can it not either directly, or by the adjunction of district companies, assure itself of vast cultivatable tracks of land bought at low price, and which would be resold with profit? I have read in a report made by an eminent man, who knew, the country very well, that by the sale of the lands only the expense of establishment could be covered.

Is there not the same thing to be done with the mines? This would have the advantage to accelerate their exploitation and their connection with the lines of the company, which would then reap a double profit.

The Mexican government, in granting the concession pure and simple of the net-work of the road which bears the name of the M. and A., has made an unequalled gift to the grantees, but it has, also, made some additions, which come to benefit a situation already so favorable.

The Mexican government grants --

1. The gratuitous right of property in all the lands of the national domain crossed by the conceded lines a width of 70 metres.
2. The right to take in the lands of the State all the material necessary to the construction and the repair of the lines.
3. The entry in free of all objects necessary to the construction and the repair; fixed and rolling material for the exploitation and construction.
4. The protection of the Mexican government for the workmen and emigrants, who will be considered as Mexican citizens.#####

The port of Gonzalez (now Topolobampo) can afford a shelter to the largest mercantile fleets; its depth at low water allows the entering of vessels of the greatest tonnage. It is a truly privileged haven, which will eventually concentrate all the commerce of the Gulf of California, which is surrounded by rich countries. A service of small coasting craft will radiate from the new port in all directions. This harbor is again admirably situated for the grand transit which it is called upon to serve, as it is as near as any other to India and Oceanica, and the nearest to any other of the lower part of the Mississippi valley.

One cannot cite in Europe any enterprise and grand work of general utility which can be compared to this railway, which will extend to

from 4,000 to 5,000 kilometres when the entire net-work will be completed. It is a connecting link with all parts of the world. Another feature is that the construction of this immense net-work can be so managed that each section of any importance, as soon as built, will find within itself a large remuneration without awaiting for the completion of the whole.

The conclusion of such an extraordinary state of things can be drawn by any one after reading this short synopsis of one of the greatest enterprises which has been attempted by American or any other genius:
ANTEUIL, July 1st, 1883.

(Signed) C. VON DER ELTZ, Engineer.