

Opening of Canal May Make Health Resort of the South American Desert

PAITA, Peru.—I am 830 miles south of Panama, on the northern edge of the great South American desert. My last letter was dated in the jungles of the Ecuadorian tropics. This comes from a country as dry as any part of the Sahara. The coast about me is all sand and rock, and the Andes mountains, which lie close behind, are as sterile as the driest part of our great western plateau. The first port after leaving Guayaquil is Tumbes. It belongs to Peru, but it lies just over the Ecuadorian line and is an oasis of green.

Beyond Tumbes the desert begins, and it extends from there southward down the western coast of the continent for a distance as long as that between the Atlantic ocean and the Great Salt lake. Its length is 2,000 miles. It borders the whole of Peru and takes up all northern Chile, extending almost to Valparaiso. In no place is it more than eighty miles wide, and yet it is 2,000 miles long. At its eastern edge it is lost in the Andes, which are without vegetation clear to their tops, where the rocks are lost in the snow.

I have seen something of the other great deserts of the world. I have been on the edge of the Kalahari desert, in South Africa, in Morocco, Tripoli, Algeria and Egypt. I have sailed along the coast of Arabia and know something of the desert of Gobi, on the edge of Mongolia. None of them is like the Peruvian desert, and none seems to be so fated a desert for all time to come.

Shut In on All Sides.
This desert is shut in between the ocean and the great wall of the Andes. These mountains rise almost precipitously from this long coastal plain and they are among the highest on the earth. They are so high and so cold that they squeeze the rain out of the winds from the east that bring all the moisture, and it flows down their eastern slopes. The winds here all come from over the mountains, but the water has been squeezed out of them on their way, and when they flow down the western slopes of the Andes they are as dry as a bone. Their load has already been dropped. It has covered eastern South America with tropical verdure. It has filled the valleys of the Amazon and the Prana with the greatest water supply known to man, and has made the larger part of this continent bloom like a garden.

Seldom Rains.
On the side of the Andes, in this strip of 2,000 miles, about the only water comes from the melting snows on the tops of the mountains. It seldom rains. Paita has not had to use an umbrella for the last twenty-two years, and waterproof coats and rubber boots would be a drug in the market anywhere from below Tumbes to far beyond Antofagasta. Indeed, the only fertile regions of the desert are where the snow-fed rivers from the mountains cross it and flow out to the sea. There are fifty-five such streams along the coast of Peru; and the cultivatable territory watered by them has an area of 1,500,000 acres. Two-fifths of this is irrigated and already in use, and it produces some of the finest crops of the world. It is at present the most important part of Peru; it feeds

most of the people and supplies a vast deal of exports. The government is now considering the further development of this region by the extension of the irrigation system, and it has had American engineers here going over the ground.

Piura is Rich Valley.
One of the richest of these desert valleys is that of Piura, which is not far from Paita. Here the lands are irrigated by the Piura river and they grow great quantities of cotton, sugar cane and grain as well as every kind of fruit that we have in California. There are oases along every stream between here and Callao, and Lima is the product of the Rimac, which gathers the snows of the Andes and spreads them in the shape of water out over the plains.

I am writing this letter at Paita, the port for the Piura oasis. It is a desert city, with streets of sand and one and two-story houses made of a framework of wood poles and bamboo canes, over which is spread a mixture of sand and mud that dazzles one's eyes. Indeed, most of the houses are of mud and fishing poles smoothed down with stucco. The walls are painted all the colors of the rainbow. The custom house, where I stopped when I came to the wharf, is bright green, and when I passed through the plaza behind I faced a big church of sky blue surrounded by buildings, some of which were as yellow as gold. This church looks out upon the plaza, which contains about the only vegetation in the whole town. This is a garden as big as a bed, quilt, filled with stunted palm trees and thirsty-looking tropical plants. There is no water to be seen outside that of the ocean, and much of the drinking supply is peddled about upon donkeys in ten-gallon kegs from house to house.

Travel by Donkeys.
The most of the traffic of Paita is upon donkeys. I saw caravans of them bringing vegetables, sugar and rice to the port, and when I went to the post-office I walked by the side of the mail wagon, which was really a dray drawn by a mule.

Notwithstanding all this, Paita is the chief port of northern Peru, and it promises to grow very fast when the canal is completed. It will certainly need some sanitation before it can be made a safe port for our great waterway. Just now the town swarms with fleas. It has had bubonic plague in the past, and its buildings are such that they would form a paradise for the plague-carrying rats. Near the custom house a large warehouse is now going up. The building already has the form of a framework of poles, upon which they are tacking canes of split bamboo. It rests on the ground and the rats will be able to climb up the walls as on a ladder. The streets here are not paved, and the sidewalks are mostly of wood. However, the air is so dry that, outside the bubonic plague, which has now disappeared, the region is exceedingly healthy, and as far as I know yellow fever has never been known.

Air Smells Fine.
During my stay here today I have tramped through every part of the town, visiting the main streets and slums, and have not had one offensive smell greet my nostrils. There are no bad odors in the desert. In this dry air flesh does not rot, and you could leave a dead chicken for a week in the street, and if



Pottery made by people of 7,000 years ago.

the vultures would let it lie there, it would not emit an odor.
The air is such that it sucks the juices out of anything left out of doors. It is as healthful as Egypt. It will keep a corpse or a mummy, and it is the dryness of the air that has preserved the mummies of Peru, like those of Egypt. There are many ruined cities of the Indians scattered over the desert, and from some of them mummies have been dug which look almost as fresh as when they were buried. They are quite as fresh as the mummies in the museum at Cairo. They were usually cured in a sitting posture, wrapped in cloth and tied up with string.
During my last visit to Peru I visited a number of cities from which such mummies have been dug, and near them saw piles of skulls from ten to fifteen feet in height. Nothing seems to decay in the desert, and there are long lines of skeletons of animals scattered here and there over the sand.

Visits Ancient Cities.
During a former trip to this desert I visited some of the ruins of cities that were in existence long before the Incas came. In the Jequesteque (Hek-e-te-pe-ke) valley back of Facasmayo I found a large mound which was once the site of a palace or possibly a temple devoted to the vestal virgins of the sun. All about me were bits of pottery of an unknown nation of the past. The remains showed that the building was nearly square, and it was 500 feet wide at the base. It was made of adobe and then plastered on the outside with mud and washed with color.
Not far from that place up in the Andes is Caismarca, where Atahualpa was imprisoned by Pizarro until he filled the room which formed his cell, as high as he could reach, with gold, in exchange



A Street in Salaverry

for his liberty. After Pizarro had gotten the gold he had the Inca chief killed. A little farther south of here is the town of Trujillo, which was founded by Pizarro and named in memory of his native home in Spain. The town is older than Lima, and it has now about 15,000 or 20,000 people. There are great ruins nearby.
In the same desert is the Chuncana valley, where, a short time ago, T. Hewett Myring unearthed pottery which is supposed to have been made by a people who were old when the pyramids were young. They lived from 7,000 to 10,000 years ago. They had a remarkable civilization and the pottery was exquisitely shaped and of remarkable artistic beauty. I have before me some photographs of it which were recently taken for the London News. The objects are now, I believe, in the British museum in London.
Peru Desert Interesting.
I find the desert of Peru wonderfully interesting. Parts of it are rocky, like much of the Sahara, and many parts of it have as fine sands as that which surrounds the pyramids on the banks of the Nile. In some places the sand gathers in drifts or great mounds, and these mounds are moved along by the winds. The mounds are in the shape of a crescent. They are made of millions of millions of little grains of sand not as large as a mustard seed, which the winds roll up over the top of the crescent. These sand mounds travel always in the direc-

tion of the winds, which are here toward the north. They climb over the hills and over the Andes through the valleys. They will not stop for roads or railroads, and they are the terror of the civil engineer. Some of the railways that cross the desert have been swallowed up by them again and again, and it is impossible to keep them back by such arrangements as our snowsheds or fences. They have to be shoveled out for the trains to pass, and the track is relaid until they have gone on.
Such sand hills often cover the paths of the desert, and the blowing sand frequently blots out the landmarks.

Paita Great for a Port.
I have spoken of Paita as a port that will furnish business for the Panama canal. The town has a railroad to the Piura valley, which is about sixty miles inland; and I am told that this road might be extended a distance of 400 miles over the Andes and connect with the Marañon river, one of the great tributaries of the Amazon. This extension would put Paita in close connection with the upper Amazon valley; it would bring one of the most fertile parts of South America right at her door, and make it a feeder for the Panama canal.
As it is now, the Piura valley promises to furnish a big export of cotton. It is there that grows the famous native cotton of Peru, a cotton which brings 6 or 7 cents a pound more in our markets than that we raise in America, and that is shipped to the United States by the thousands of bales. The native Peruvian cotton is sometimes called vegetable wool. It has a long fiber, and it is very like wool in its texture. We use it to mix with wool for the making of hats, hosiery and underwear. It is said to give the cloth a finer luster and to render it less liable to shrink.

Great Place for Cotton.
Indeed, this land seems to be the home of the cotton plant. It was growing here when Pizarro came, and he found cotton cloth in the tombs of people who lived long before the Incas. The native cotton grows on a tree which will continue to yield for twenty years after planting. It is usually at its best at three years, and after that it begins to decline. The common method of planting is to put the seeds in the ground with a stick, and let the trees reach a height of six or eight feet. After that they are cut back from year to year in order that the crop may be the more easily gathered. On other plantations a single sowing is allowed to do for several annual crops. The cotton begins to ripen about ten months after it is planted, and the principal yield is obtained when the plants are twenty months old.

The picking is done by the native men, women and children, who also sort the cotton by color before it is ginned. I say by color, for much of this Peruvian cotton is brown or red. The brown cotton and white cotton grow on the same tree; and there may be brown and white lint in the same boll. The colored cotton is largely sold to the Indians, who use it for their ponchos and hammocks.
Yield for Long Time.
In addition to this native Peruvian cotton, they are now growing American upland cotton and Sea Island cotton from American seed. The Sea Island cotton has but a small acreage, and its production is confined to several small valleys. The American cotton will yield here for

three years without replanting, but the plants are cut back every year. At present the cotton exports of Peru amount to something like 100,000 bales yearly. About 12,000 bales of this product is consumed at home. There are seven cotton factories scattered here and there over the country, five of them being in the city of Lima.

The Peruvian steamer upon which I am sailing has brought here two bargeloads of galvanized iron pipe and of eight-inch castron casings for the Lobitos oil regions, which are situated about forty-five miles up the coast. The pipe comes from the National Tube works at Pittsburgh, and the shippers are a branch of the Standard Oil company. I do not know how this freight got to our Atlantic seaboard, but it was carried down to the Isthmus of Panama and there transferred to the railroad and thence to this Peruvian steamer. The freight must be heavy, and, considering the handling at Panama, the rate will probably be cut in half when the Panama canal is completed. We have a great deal of heavy machinery on board that has come the same way.

Oil Fields Are Extensive.
Speaking of the oil fields of Peru, I could see the derricks of the Petroleum port of Tarala as we came down to Paita. The petroleum is found there on the edge of the sea and this is so with other oil fields all along the coast. They are now getting out petroleum in several provinces in Ecuador; there are oil wells at Tumbes, Peru, and there is a refinery at Zorritos, where forty-eight wells are now working. The piping we have on board will go by launch to the oil fields, and the castings will be used for new wells. They are now discovering oil also in southern Peru, and are even boring wells on the shores of Lake Titicaca, at an altitude of two miles above the sea. There the oil is struck at about 500 feet. Ten wells are already working and each is yielding an average of fifty barrels daily.

The petroleum output of this country is now more than 1,000,000 barrels per annum and the business is at its beginning. More than 600 wells are now working, and of these 300 are in the old fields of Zorritos. The oil is of a high grade and it is good for lighting as well as for fuel. The steamer upon which I now am burns fuel oil instead of coal, and we have taken on a fresh supply here. The tank runs down to the ocean and a little oil barge, whence it is conducted into the reservoir of the steamer.

Land with Small Boats.
The landing at all these coast ports is done in small boats. The moment our ship came to anchor at Paita white boats with red flags started out from the shore. They were rowed by barefooted Indian sailors clad in blue with white caps on their heads. Behind them came the boats of the natives bringing vegetables and other wares out to the ship, and farther back still were towed the great barges loaded with freight to be taken away on the steamer. At Etan, the port nearest here, the harbor is rough and the landing of passengers is by means of a barrel, the half of which has been cut away and turned into a chair. The passenger takes his seat in the barrel, whereupon he is lifted by the

(Continued on Page Twelve.)

ON AND AFTER TUESDAY, FEBRUARY 24

During the Construction of New Building

The United States National Bank of Omaha

CAPITAL \$1,000,000

SURPLUS AND PROFITS \$675,000

Will Occupy Temporary Quarters at

1607-1609 FARNAM STREET

(Opposite Present Location)

The temporary quarters are commodious; new fixtures and vaults have been installed and the Bank is better equipped than ever to take care of its constantly increasing business

MAIN BANKING ROOM
1607 Farnam Street

SAVINGS DEPARTMENT
1609 Farnam Street