

Mighty Works to Be Built at Terminals of the Canal

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CULEBRA, Canal Zone, Panama.—My investigations this week have been devoted to the terminals of our great canal at Panama. What kind of cities are we to have at the Atlantic and Pacific ends of Uncle Sam's famous waterway? How shall we take care of the shipping and what will be the accommodations for passengers going from one part of the isthmus to the other?

These and other questions of terminal facilities will soon bulk large in the minds of the public. The digging is fast approaching completion, and the endless river of earth which is flowing from Culebra down to Balboa will finally shrink and then stop. I have already gone in from the Pacific end of the canal almost to the Miraflores locks. The dredges are still at work there, but within a few months the channel could be made ready for ships.

The dredging on the Atlantic side is rapidly approaching completion. The dam which crossed the canal at Mindi has been cut through and the salt waters of the Caribbean sea are now against the locks and within a stone's throw of the Gatun dam.

The work of building up the foundations for the terminals of the future is already under way and docks and breakwaters are rising on both sides of the isthmus. So far there is much yet to be laid out, but the plans of the engineers have been carefully made, and as soon as congress gives its orders this part of the canal construction will rapidly move.

Talk With Rear Admiral Rousseau.
The canal commissioner who has special charge of the terminals is H. H. Rousseau, one of the most expert engineers of the United States navy. He is still a young man, but he has had long experience in work of this kind and he was chief of our great naval bureau of yards and docks when he was appointed one of the engineer commissioners of the canal. He was a civil engineer by profession at the time he passed a competitive examination for similar work in the navy, with the rank of lieutenant, and he did so well there that now, at the age of 42, he has become a rear admiral and under Colonel Goethals as chief has some of the most important branches of the canal work under him.

It was in the administration building here at Culebra that I looked over the maps of the proposed terminals and talked with Mr. Rousseau about them. Said he:

"The arrangements for the terminals of the canal are by no means complete. We have made our plans, but so far many of them have not been passed upon by congress and much will depend upon the policy of the government as to the treatment of canal traffic. Other matters have been definitely settled and we are already working them out. You have seen the great breakwaters which we are building at both ends of the canal. On the Atlantic side they will pass by Toro point, where the lighthouse stands. From that point we are putting in a breakwater 11,000 feet long to shut out the prevailing storms from the western side of the harbor. That breakwater has a width of fifteen feet at the top and it will rise ten feet above the mean level of the sea. It will contain altogether in the neighborhood of 3,000,000 cubic yards of rock, some of which is coming from the quarries of Porto Bello.

"At the Pacific end," continued Admiral Rousseau, "we are making an even greater breakwater. This is to join the port of Balboa with Naos island, a distance of more than three miles. It will run nearly parallel with the axis of the canal prism, and is to keep the current which sweeps up that shore from affecting the canal. That breakwater will contain about 15,000,000 cubic yards of earth and rock, which is equal to a block 300 feet wide, 300 feet high and more than a mile in length. The most of this is already in place and it consists of the spoil which has been brought down from the Culebra cut. We began work upon it in May, 1908."

Big Docks on the Atlantic.
"Tell me something more about your plans for the Atlantic end of the canal."

"According to those we have already made," said Mr. Rousseau, "we shall, if congress consents, build five great docks at Cristobal, each of which will be 1,000 feet long and 150 feet wide. There will be 300 feet between each two of the docks, and at the head of each dock will be ample landings for small boats. The material will be reinforced concrete, and the docks will have railroad tracks, moving cranes and all sorts of machinery for handling freight of every description. They will accommodate any steamer now afloat, and should be sufficient for the traffic of the canal."

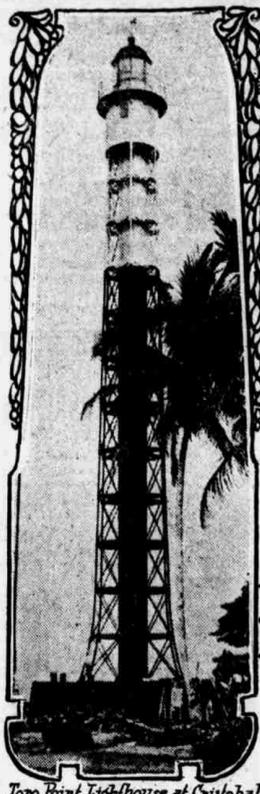
"But has congress yet made any appropriation for the building of these docks?"
"No; but the demand for them is great, and we are fortunate in being able to construct the first of them through the resources of the Panama railroad. That railroad is one of Uncle Sam's best paying enterprises. Through its commercial business it has already earned several million dollars above its net expenses and this might be used for dock construction. As it is, the present facilities do not accommodate the traffic. This is so as to our own steamers—I mean those belonging to the Panama railroad—and it is so also as to the steamers of the United Fruit company and of all other lines which are now sending their vessels to Colon, but which would gladly change to the more sheltered and better anchorage that we could provide. When our docks are completed our ships will

"I doubt whether that would be advisable," but, if so, it is a question for the future."

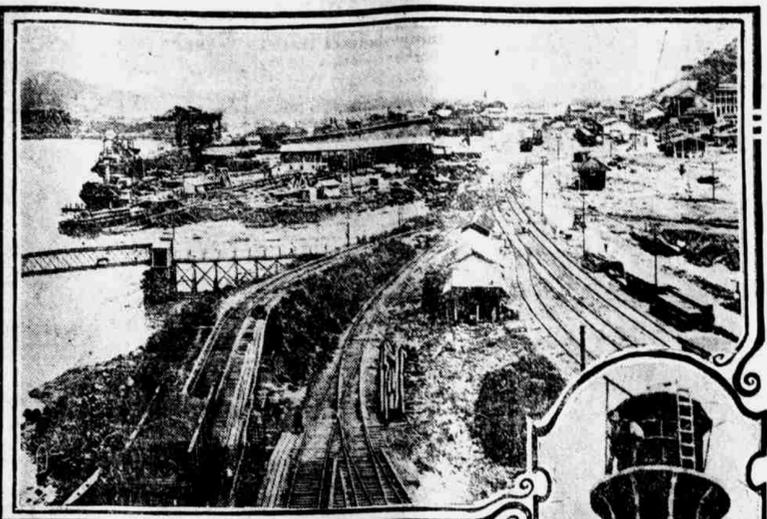
The Docks at Balboa.
"Can you not give me some idea of what we should have at the terminus on the Pacific?" I asked.

"We shall need about a mile of dock frontage outside the coaling docks, and we shall prepare a sufficient area that can be kept for the extension of the water frontage as required in the future. Our plans propose a coal dock 1,000 feet long and fuel stations on the hills so connected with the docks by pipes that the oil will flow right down into the steamers. We shall have repair shops and connected with them, marine railroads of large size, so that examinations and repairs of tugs, barges and similar small vessels may be made under water without taking them into the large dry docks."

"And then as to the dry dock," continued Mr. Rousseau. "It is proposed to build one at Balboa so big that it will handle any vessel that can pass through the locks. This dry dock will be near the end of the auxiliary coaling station,



Toro Point Lighthouse at Cristobal



Pacific End of the Canal where the Shops will be



Turning the Atlantic into the Canal



Range Light on Pacific End of the Canal

and it will be entered from the canal channel through a slip 400 feet long." "What are the present arrangements for handling freight at Balboa?" "They are not sufficient for the traffic. The only facilities consist of a steel wharf about a thousand feet long which was built by the French, and a wooden extension much shorter. The latter was constructed since we began our work here. These two wharves can berth only five vessels at once, and at present the steamships making Balboa a port of call

are often delayed. This condition is being remedied by the construction of a concrete wharf about 700 feet long, which will afford two additional berths. This is being made by the Panama railroad with its own funds, but it has been so located that if congress should authorize the construction we have outlined it will fit into it and become a part thereof. Our plans are such that additional wharves can be constructed from time to time as needed. The conversation here turned again to

hope to put the docks, wharves and repair facilities on a strictly commercial basis. We want them to be self-supporting and to make the charges sufficient to cover the first cost and also their maintenance and operation. In addition we hope that they will bring in something to augment the revenues of the canal. We want the best of terminal facilities for the vessels which use the canal, but we also want to make them sources of revenue in the canal. They will in no appreciable degree compete with existing and similar supplying agencies of the states, and it must be remembered also that they will be available to the government in times of military necessity. They will be of value to the navy and will give the same advantages that the government would have from the establishment of a naval base here."

"But have you room for these shops in the Pacific side of the isthmus?" "Yes. By the spoil from the Culebra cut we have built up about 35 acres, some of which has been redeemed from the sea, and we have other ground on the mainland. We shall reserve an area of about forty-five acres for shop yards and for the storage of material and supplies, and we shall have ample room for all our necessities."

A Trip Through the Canal.
I here asked Admiral Rousseau to give me some idea of what one would see in making a trip through the canal when completed. He replied:

"We shall start in from the Atlantic. Let us suppose that the traveler is standing on the deck of the steamer from New York or New Orleans as it approaches the coast. Nearing the canal entrance he sees the low wooden buildings of Colon on the left, the houses of Cristobal among the coconut trees and the tall white lighthouse of Toro point away at the right. He passes by Colon and its harbor, and, going in by the breakwater jutting out from Cristobal point, enters the canal. He steams on through it to the foot of the Gatun locks, a distance of about seven miles. As he comes in he can see the old French canal and he crosses it near Mindi, about half way to Gatun. The channel here is about 500 feet wide and the country is flat on the left, while on the right in the distance may be seen grassy hills.

"Coming to Gatun the man sees the great green grass sod dam at the right. It is now ragged and rocky, but it will be filled in with earth and added, and it will end in green hills with the white concrete spillway showing out at the center."

"At his left as he moves up the channel he will see the mighty white locks of Gatun. The lowermost one will probably be open, and its water will be on the level of the sea. His ship will steam into it, and will there be harnessed to the four towing locomotives which will aid in moving and steadying it as it goes onward from gate to gate.

"As soon as the vessel is in the gates behind will be closed and the water rushing through many holes from the mighty conduit so big that a Pullman train could go through them will quickly raise the steamer to the level of the lock above. A moment later the front gates of the lock will open, and the steamer will pass into the second level of lock and thence in the same way raise to the third and finally sail out through the channel into Gatun lake at eight-five

feet above the level from which it steamed into lock number one."

Traveling Through Gatun Lake.
At this point Admiral Rousseau stopped a moment to show me some maps and then, tracing the course of the ship with his finger, he continued:

"Emerging from the locks at Gatun, the course of the steamer will be practically due south for three and one-half miles. It will pass through a 1,000-foot channel, with the water extending beyond it, and the tops of the trees and islands will take away the idea of a canal and make one think that he is passing through a large and deep lake. A little further on his vessel will take a sharp turn to the left and then go in a straight course for four and a half miles to a point about one mile below where Balboa now is. From that point on the right the opening excavated by the French for their locks may be seen, and a little farther on the vessel will pass over the sites of Frijoles and other villages which have been submerged by the waters of Gatun lake.

"After a journey of fifteen miles the thousand-foot channel begins to narrow. It is reduced to 800 feet, and the canal has now the appearance of a wide river with hills on each side. It is the valley of the Chagres. Still farther on the channel is reduced to 550 feet and the vessel passes on into the Culebra cut and sails through it for a distance of also miles to the locks of Pedro Miguel. This part of the journey will be especially interesting. The canal channel will be 300 feet wide and the hills will rise high above the steamer, reaching in the center a maximum of over 550 feet. The sides will be planted with earth-holding grasses and bushes and there will be but little evidence of the mighty work we have done in making the cut.

"Entering the locks at Pedro Miguel, the steamer will drop thirty feet into Miraflores lake, a beautiful sheet of silvery water, and will travel there a mile and a half before it reaches the locks of the same name, where it will make its two great steps to the channel at the level of the Pacific.

"From the foot of the locks the ride to Balboa will be only three miles, and deep water in the ocean about five miles farther. The land there is low, with hills in the background covered with green. On the left going out will be the great wharves and repair shops of Balboa, and in the distance one may see the little archipelago of Perico, Culebra and Flamenco, on which the fortifications will be.

"The trip throughout will be wonderfully beautiful and intensely interesting. It will embrace views of mountain and valley of river and lake, of tropical plants and flowers, and of mighty trees laden with orchids. As far as canal trips are concerned, it will be more beautiful than any other on earth."

FRANK G. CARPENTER.

Recalling a Troupe's Name.

The manager of a theatrical company playing a "one-night stand" in Texas was talking to the hotel proprietor regarding the prospects for business and had been assured they were good. Then he asked: "What was the last show you had here?" The landlord thought for a moment, and turning to the clerk said: "Say, Fred, what's the name on those trunks upstairs?"—Kansas City Star.

HOW ANY WOMAN CAN DEFY NATURE AND MAKE HERSELF INTO A QUEEN OF BEAUTY

By Miss Valeska Suratt, the World's Greatest Exponent of Self-Made Beauty

The reader of this remarkable series of beauty talks by the great actress, Valeska Suratt, now appearing every Sunday in *The Bee*, will probably be surprised at the remarkable simplicity of her advice. You will notice how little there is to do, yet how important is the little that is given. In this simplicity lies the magic of Miss Suratt's art, different from the complicated, tiresome and burdensome rules and theories usually given for beauty culture.



By Valeska Suratt
WELL, my dear sisters, I almost feel as though I were going to make a confession. They say this is good for the soul. At any rate, I feel a certain thankfulness at being able to satisfy the longing of so many women for the priceless charm of beauty. I say priceless merely to indicate its great value and importance to every woman, yet it is by no means priceless from the standpoint of money value. You may have these charms just as surely and definitely as you are reading this, and at little cost.

ice-water you want. In other words, I believe in sanity. At least, my dear sisters, off the stage. I sometimes wonder whether or not I am really the one who has found a real source of beauty-making, and I believe it so easily, so quickly, so promptly, almost as at the touch of a fairy wand. Yet, if anyone is entitled to the fruits of great labor, I believe I am one. I studied and I worked. All that I had tried and used before were makeshifts and make-believes. I knew it, because when I would arise in the morning with hair disheveled, with drooping eyes, and the ruby on my cheek had gone, and the palor of the morning had come, all the work of the previous day had vanished and another day of struggling for twelve hours of beauty at the dressing-table lay before me. Now the mornings have no terrors for me. The beauty work that I did yesterday, last week, last month last year, still remains for today, tomorrow and the future. I live in peace and happiness with the becoming world before me. They receive me with open arms, and I love them.

Today I have picked out for you one of the most important of my beauty secrets, and I am sure if you will do exactly as I instruct you to do, you will

In this first of her beauty-talks, Miss Suratt has something to say of supreme importance to every woman, and every man ought to read it and heed it. Every department of beauty-making will come in for its share of consideration. Nothing will be omitted which in any way has a practical bearing upon the ability of every woman to make herself, as this great actress shows, a queen of transcendent beauty, in a very short time. Nothing like this series of beauty-talks has ever before been published. Next Sunday will appear the second of this beauty series. Act upon today's advice today and experience the improvement you little expect, by the time next Sunday rolls around.

In the next few weeks, say with me, Eureka! Then your heart will palpitate with mine, and you will know.

Most important to the average woman is how to get rid of those telltale signs of age, Father Time's register, wrinkles. Volumes have been written upon the subject, but the only treatment worth while is the treatment that has done the work. The secret is this: I have used the following treatment for several years, after I gave up the old, thread-bare advice that seemed to take an age to produce any result at all. I made up the treatment myself, and had several of my dearest friends use it. This was at the very beginning:

The result you will picture to yourself when I say that one elderly lady in particular, of 62, a good friend of mine in Philadelphia, began to use it a day or so before I left that city. I saw her again in a little over three weeks afterward, and I was so astonished I gasped. She confessed she had used nothing else but the treatment I gave her. She had had three or four deep wrinkles in her forehead, and crow's feet that you could almost count clear across the room. These, to my wonderment, were almost gone. And the result on a few of my other friends has been invariably the same. Upon myself, of course, I prefer not to talk about myself too much. I might grow a double chin.

Valeska Suratt In One of Her Magnificent Stage Costumes



follows, obey instructions implicitly, and you will not be disappointed. The cream will be dissolved in a large bowl pour one-half pint boiling water. In this pour two tablespoonfuls of glycerine. Place this bowl in a pan of water on a slow fire. In a few minutes add two ounces of eptol and continue stirring until all is dissolved. At first it will look like jelly, then it will start to cream. When it does this, remove it from the fire and stir constantly until cold. Then keep it in an air-tight jar. You should be able to get eptol at any good drug store and it should not cost you more than fifty cents. This will last quite a while.

Apply this cream every morning with the tips of the ten fingers, after you have washed your face thoroughly with warm water and soap. Plaster your face very liberally all over with it, around the eyes, on the forehead, on either side and anywhere, I prefer not to talk about a baby's skin, but dig right in. Take up the treatment yourself as up the flesh in your fingers and pinch

Green Gables
DR. BENJ. F. BAILEY.
SANATORIUM
London, Wis.
This institution is the only one in the central west with separate buildings situated in their own ample grounds, yet entirely distinct and rendering it possible to classify cases. The building being fitted for and devoted to the treatment of noncontagious and venereal diseases, no others being admitted. The other Rest Cottage, being designed for and devoted to the exclusive treatment of select mental cases, requiring for a time watchful care and special nursing.