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Read the Hawaiian Gazette

TWO WHARF PLANS

(Continued from First Page.)

The situation of the wharf as proposed by the Government is not at all suited to the requirements of the railway. It would stand nearly east and west when the wharves for railway use should stand nearly north and south, to be convenient for placing cars alongside ships. All additional expense incurred through such awkward unbusinesslike arrangement of bringing ship and car together, is borne by all the people having freight interests on that side of the harbor. Perhaps some one who "knows all about it" will be good enough to explain in what way the "people" are to be benefited by the consummation of the Government plan. No one yet has done so!

In closing, permit me to add: Mr. G. F. Allardt, a civil engineer of high standing upon whose survey and report the entrance to Honolulu harbor was deepened to 30 feet a few years since; has, unasked, submitted his views on the very subject herein discussed, in a letter addressed to the undersigned. As Mr. Allardt would be considered authority on harbor improvements anywhere in the world, it has been suggested by some prominent men who have read the letter that it ought to be printed for the benefit of the public, especially as the author, is wholly disinterested, and expresses his unbiased opinion in a friendly manner. Thanking you for this indulgence, I am very respectfully,
B. F. DILLINGHAM.
Honolulu, April 25, 1898.

B. F. DILLINGHAM, Esq., General Manager Oahu Railway & Land Company, Honolulu, H. I.

Dear Sir:—I have read with much interest the correspondence relative to the enlargement of Honolulu harbor as published in the "Advertiser" of January 18, 19, 20 and 21, copies of which you mailed me.

The importance of the subject, not only to your company but to the public at large, demands the most serious consideration. Being somewhat familiar with the conditions of your harbor, I take the liberty of herewith submitting a few facts and figures which, I trust, may prove of some value in solving the problem. I shall not touch upon the legal rights of the contesting parties, as that matter has, very properly, been submitted to the courts, but shall confine my remarks solely to the engineering and commercial features of the case, regardless of the real ownership or corporate rights in the premises.

For a clearer understanding of the situation I submit two maps: Map No. 1, showing the proposed plans of improvement and the part of Honolulu harbor under discussion, and Map No. 2, showing the general plan of harbor improvements adopted in San Francisco. Both maps are drawn to the same scale, 300 feet to the inch.

As I understand it the problem is how best to increase the shipping facilities in the northern arm of Honolulu harbor. The Government plan is to construct a substantial wharf, 600 ft. long and 100 ft. wide, across the mouth of the Nuuanu inlet, and to fill in, or reclaim, the shallow, tide lands between the wharf and the shore. (See Map No. 1). It is apparent, at a glance, that this arrangement will add only 600 feet to the available wharf frontage of the harbor. On the other

hand, the plan proposed by your company, which I will call the "Railroad Plan," provides for a system of parallel wharves and slips running about at right angles to the proposed Government wharf. This plan will eventually create an additional wharf frontage of 5,200 feet, or more than eight times as much as the Government plan. The construction of the wharves and the dredging of the adjacent slips would, of course, be carried on gradually, one at a time, as the necessities of commerce may demand.

The Government officials admit, it is true, that greater wharf accommodations will be required in the near future, in which event they say that "slips can then be easily cut into the long wharf now being built." This means, in other words, that two-thirds of this 600 ft. wharf must be "rooted up" and destroyed, and that then, after all, the railroad plan of parallel wharves and slips will be practically adopted. It may well be asked, why not build the wharf upon the correct line in the first instance instead of wasting the public funds in building a costly structure in the wrong place and afterwards pulling it down.

The Government further argues that the railroad plan involves too much dredging, and that dredging is expensive. This may be true, but an inspection of the map will show that the construction of the Government wharf not only necessitates a large amount of dredging from the wharf out to the 26 ft. depth at low tide, but also involves the cost of filling to street-grade the entire area lying between the wharf and the shore-line of the inlet—nearly fifteen acres of tide lands, requiring, at a rough estimate, about one hundred and fifty thousand (150,000) cubic yards of material, a large portion of which must again be

dredged out whenever the Government decides to cut out those slips; another uncalculated and wasteful expenditure of the public funds.

Furthermore, the Government plan, instead of enlarging the harbor, will in reality contract it, as its wharf extends some fifty feet farther into the harbor than do the pier-heads of the wharves proposed in the railroad plan.

Finally, should the Government wharf be constructed, the material in front of the same will be dredged out to a depth of, say, 26 feet at low tide, and the very serious question may then arise whether it will not become necessary to construct a massive retaining wall, or sea-wall, some 600 feet in length, for the purpose of preventing the soft mud from sliding back into the harbor; and then, when said slip-cutting process is begun, two-thirds of this costly sea-wall will have to be torn out and removed—another waste of the public funds.

The wharf and slip system proposed by your company is, in no sense, a new experiment. With some slight modifications it has been adopted by the maritime cities of the United States, notably New York, Boston and Portland. In San Francisco, notwithstanding its five or six miles of available harbor frontage, the same system has been approved and adopted. It was recommended after mature consideration by a commission appointed in 1877, composed of such distinguished experts as Admiral Rodgers, of the U. S. Navy, Colonel Mendell, of the U. S. Engineers, Professor Davidson, of the U. S. Coast Survey, and Mr. T. J. Arnold, the then chief engineer of the Harbor Board. The general design is shown on Map No. 2. The wharves or piers, as they are here called, run out 600 feet from the sea-wall, and the slips between them are 200 feet in width. This width of slips was considered essential to obviate the great inconvenience and expense of vessels lying at outer berths hauling out to allow entrance and exit for vessels lying at inner berths at the same slip. I notice, by the way, that your proposed slips are only 150 feet in width. This is a little scant, but considering that the breadth of beam of the largest ship seldom exceeds forty feet, this width will answer the purpose fairly well, as it gives a clear passage of seventy feet for exit and entrance between vessels docked on both sides of the slip.

A noteworthy feature of the San Francisco plan is the Belt Railroad, so called, which will eventually be extended around the entire waterfront. The use of its tracks is made free by law, to all railroad companies. The method of connecting the tracks with the piers is also shown on the map. The main object sought to be attained was "to bring ship and car together," one of the most essential requirements of modern commerce.

Returning to our Honolulu harbor, it seems to me there can be but one opinion as to the relative merits of the two plans proposed. To sum up—the Government plan will add only 600 feet to the available wharf frontage and will actually contract the harbor; while the railroad plan provides for a future extension of some 5,200 feet of the wharf frontage, besides materially augmenting deep water area of the harbor.

In case the controversy is carried to the Legislature, I would suggest that you have prepared a large wall map, to be hung up in the Legislature hall while the matter is under deliberation. The map should exhibit all lines and objects likely to be referred to in the discussion. Have the lines made heavy, and the figures and lettering large and bold, in order that they can be plainly distinguished by all the members. Plenty of coloring will add to the effectiveness of the map. Draw to a scale, of say, 20 feet per inch, which will make the size about 9 feet by 15 feet.

I would further suggest that Mr. Kluegel, your Chief Engineer, come well fortified with figures on the relative cost of the two plans, especially in the matter of dredging, not forgetting to emphasize the advantage of utilizing the dredged material in reclaiming low waste lands, thereby adding to the taxable property of the city.

In conclusion, I desire to say, with all due respect to the gentlemen composing the Hawaiian Cabinet, (several of whom I have the honor to know), that the carrying out of the Government plan would in my humble judgment be a very grave error, and would result in irreparable injury to Honolulu harbor. Indeed, it may be the first step to drive the Honolulu shipping to the deep and more commodious waters of Pearl Harbor.

Respectfully submitted,
G. F. ALLARDT,
Chief Engineer, 420 California Street,
San Francisco, Cal., February 17,
1898.

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