

# Seaports of the Northwest

(Continued from Yesterday.)  
APPENDIX.

Reference has already been made to the features of cost and general undentifiability of the proposed ship channel to Portland. The residents of the Columbia basin are vitally interested in this project, and some details are worthy of attention. The disagreement between Major Handbury and Col. Mendell, and between Major Handbury and the board of engineers, on the items of durable style of construction and of larger width of channel, have been specified in a general way. Major Handbury calls for dredging a channel only 150 feet wide. In such dredging, the cuts at the two sides of the channel are made with vertical sides, with the expectation of inflow and some consequent lessening of depth and width. This action continues until the slope conforms to the natural slope of the river bed, always a very long slope in soft material. Col. Craig-hill speaks of the necessary yearly expense at Baltimore as follows:

"In excavation no effort has been made to give with the dredge any specified slopes to the sides of the dredged channel. To require anything of that kind would cause contractors to raise their prices, even if the whole work were contracted for at once. In this case, the way has been to make the sides of the excavation practically vertical. As the side slopes slip in, the dredge keeps the bottom clear until the natural slope in the water is gradually taken." Such inflow will make a serious inroad in a channel of only 150 feet original width, and will increase the difficulties of navigation. To have recommended such a narrow width, particularly in the great Cathlamet bay where Major Handbury himself says "lands are continually drifted about by the waves," is the strongest evidence of a desire on Major Handbury's part to commit the government to his project by asking at first only for what is merely an initial amount, the thinnest possible edge of appropriation that could be devised for a very broad ultimate wedge of large expenditure. In the great mass of river and harbor appropriations it is utterly impossible for the board of engineers to know of their own knowledge and from their own examination, what is desirable in each case, especially for remote Oregon. The government is always at the mercy of the local engineer, whose social and friendly relations with the prominent men of the largest city of his district will almost invariably, perhaps unconsciously, and always without any dishonest purpose, tend towards his coinciding with their views. But in this case, and working only on common sense principles, without close knowledge of the proposed work, the board has seen and negatively many evidently undesirable recommendations of Major Handbury.

The Willamette river portion of the proposed improvement is stated by Col. Mendell, with good reason, to be the "most difficult part of the whole problem." Of the total distance to be deepened, namely ten miles, "four miles are in the Willamette river." It is a well known fact that the erosive power of rivers on the bottom of channels is exerted at low water stages. High water erosions take place laterally along the banks and at obstructions, and not in the bottom, and the suspended material so obtained is deposited in the channels during floods. Major Handbury refers to this action in the Willamette. "The high water velocities carry large quantities of heavy material." A point of land 12 to 15 feet above water and 200 feet wide and which seemed to be solid, "during one night" "had sunk out of sight" when the river was four feet above low water mark. The only erosive power available for the Willamette is its very small volume at low water stage. This has already so nearly reached the limit of its effectiveness of erosion for the channel width requisite, that with only 100 feet width and only 19 feet depth, a loss of a small part of the volume in the past has neutralized its scouring power. An indication of this is found in Major Handbury's report. He says of the attempted dams across Martin's and Burke's slough:

"It was estimated that about one-tenth (only) of the low water discharge of the river passed through these sloughs, which fact was largely instrumental in the formation of Martin's Island bar."

In urging the closing of the channel south of Swan Island, he says:

"What is spoken of as a channel, is in reality a high water chute. At a low stage of the Willamette, there is not more than one foot of water through a narrow, tortuous channel." Yet this slight amount of water is so much needed for scouring the other channels that he goes on to say:

"The main ship channel is on the north side of Swan Island. The flow of water through this is barely sufficient to maintain in it a depth required by existing and contemplated navigation. There is a bar through which it is necessary (even with the present 29 foot channel) to dredge a cut each year after high water in the Willamette in order to maintain a channel of 29 feet depth. The inability of the present low water volume to keep a 25 foot channel scoured out, is evident."

It is noteworthy that Col. Mendell introduces a cautious "perhaps" into his opinion of his younger subordinate's expectation that the channel will be deepened by natural action. Certainly for all parts of the proposed Willamette im-

provement, and not merely for one part, it will indeed, as Col. Mendell says, "take some years to accomplish the result by the unaided erosive powers of the water." It is almost certain that expensive dredging alone will secure deepening below 20 feet. Of dredging, the engineer speaks as follows:

Willamette river. "A channel 18 to 19 feet deep has been repeatedly dredged at the head of Swan Island, only to be filled again at the next succeeding high water of the Willamette." Major Handbury's report, 1891.

"The use of the dredge to remove the worst part of shoals gives quick results, but it is an expensive mode of procedure, as a fresher of a few days' length has often obliterated the work of months of one or more dredges." Col. Craig-hill.

"When quick results are demanded, the engineer is forced to use the dredge, although he may be sure that the work in whole or in part must soon be done over again." Col. Craig-hill.

"While some have often favored dredging, Mr. Eads strongly opposed it." Report on Mississippi jettes.

Pensacola. A channel dredged in 1834 to 24 feet, had shoaled to 19 feet in 1859. Such cases appear constantly in the reports of the United States engineers.

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We authorize our advertised druggist to sell Dr. King's New Discovery for Consumption, Coughs, and Colds, upon this condition, if you are afflicted with a Cough, Cold, or any Lung, Throat or Chest trouble, and will use this remedy as directed, giving it a fair trial, and experience no benefit, you may return the bottle and have your money refunded. We could not make this offer did we not know that Dr. King's New Discovery could be relied on, it never disappoints. Trial bottles free at Chas. Rogers' Drug Store. Large size 50 cts. and \$1.00.

### SPECIMEN CASES.

S. H. Clifford, New Cassel, Wis., was troubled with neuralgia and rheumatism, his stomach was disordered, his liver was affected to an alarming degree, appetite fell away, and he was terribly reduced in flesh and strength. Three bottles of Electric Bitters cured him. Edward Shephard, Harrisburg, Ill., had a running sore on his leg of eight years' standing. Used three bottles of Electric Bitters and seven boxes of Bucklen's Arnica Salve, and his leg is sound and well. John Speaker, Cambridge, O., had five large fever sores on his leg. Doctors said he was incurable. One bottle of Electric Bitters and one box of Bucklen's Arnica Salve cured him entirely. Sold by Chas. Rogers, druggist.

### SEE THE WORLD'S FAIR FOR FIFTEEN CENTS.

Upon receipt of your address and fifteen cents in postage stamps, we will mail you prepaid our souvenir portfolio of the World's Columbian Exposition the regular price is fifty cents, but if you want one, we make the price nominal. You will find it a work of art and a thing to be prized. It contains full page views of the great buildings, with descriptions of the same, and is executed in highest style of art. If not satisfied with it after you get the book, we will refund the stamps and let you keep it. Address H. E. Bucklen & Co., Chicago, Ill.

**A FOOT-HOLD** for Consumption is what you are offering, if your blood is impure. Consumption is simply Lung Scrofula. A scrofulous condition, with a slight cough or cold, is all that it needs to develop it. But just as it depends upon the blood for its origin, so it depends upon the blood for its cure. The surest remedy for Scrofula in every form, the most effective blood-purifier, flesh-builder, and strength-restorer that is known to medical science, is Doctor Pierce's Golden Medical Discovery. For Consumption in all its earlier stages, and for Weak Lungs, Asthma, Severe Coughs, and all Bronchitis, Throat, and Lung affections, that is the only remedy so unfailing that it can be guaranteed. If it doesn't benefit or cure, you have your money back.

No matter how long you've had Catarrh, or how severe, Dr. Sage's Remedy will effect a permanent cure. \$500 reward is offered by the proprietors of this medicine, for an incurable case of Catarrh.

**THE** music of the trees and wild river waves and all the summer-time singers comes sweetest to the housewife when she knows the double burner oil stove instead of the red-hot cooking range. There'll not be an evening from this on till October 1st, but she'll be glad she bought one. Have you seen those in our window? \$4.50. That gentleman who said they were extravagant has changed his mind and has purchased his wife and married daughters each one.

### ADMINISTRATOR'S NOTICE.

Notice is hereby given that the undersigned has been appointed administratrix of the estate of George McLean, deceased, late of Clatsop county, Oregon, by the county court of the state of Oregon for Clatsop County, and all persons having claims against said estate must present the same properly verified to the undersigned, within six months from this date, July 24th, 1894.

ELIZABETH McLEAN,  
Administratrix.

### ADMINISTRATOR'S NOTICE.

Notice is hereby given that the undersigned has been appointed administrator of the estate of A. K. Barrow, deceased, late of Clatsop county, Oregon, by the County Court of the state of Oregon for Clatsop County, and all persons having claims against said estate must present the same, properly verified, to the undersigned, at the office of Fulton Bros., attorneys at law, in the City of Astoria, in said county, within six months from this date, June 13th, 1894.

### SHERMAN CASE, Administrator.

**ADMINISTRATOR'S NOTICE.**

Notice is hereby given that the undersigned has been appointed administrator of the estate of R. W. Morrison, deceased, late of Clatsop county, Oregon, by the County Court of the State of Oregon for Clatsop County, and all persons having claims against said estate must present the same, properly verified, to the undersigned, at the office of Fulton Bros., attorneys at law, in the City of Astoria, in said county, within six months from this date, June 14th, 1894.

### T. E. MORRISON, Administrator.

## Blue Devils



The business man who says that advertising does not pay does not advertise. He is the one that always doubts the prosperous trade reports he hears of his competitor, who does advertise. He sits in the back of his store, smokes his pipe and wonders why he isn't making any money. He has the blues when he should have trade. He not only lets his neighbor get that neighbor's share of the business, but a good part of his also. He sees people whom he thought old friends of his go into his competitor's store and come out with bundles of goods, when he has the same articles on his shelves, and perhaps at lower prices than they paid his competitor for them. Why is this so? It is because his competitor lets the public know in an intelligent way through the local papers what he has to sell and when he has it.

The successful advertiser looks after his advertising space as he does his clerks. He changes his ads. in such a way the people are attracted by them. He feels that to make money he must be willing to spend some; that there is strong competition in all lines of business, and to get his share of the trade he must advertise, and to do it in the most skillful and intelligent way. If he cannot write advertising matter himself, he seeks the aid of some one who has made the writing of advertisements a study—some specialist, who will see that it is properly written in a catchy and displayed way—some one whose duty it is to take off the shoulders of a busy man all the worry of making up an ad.

No business man attempts to cure his own sickness, pull his own teeth, make his own clothes or attend to his own law cases. He employs specialists for each of these various services, and saves money by doing it. It is through its language and arrangement that an advertisement gets its business-bringing qualities. There must be something to attract public attention and hold it; something of interest, something out of the ordinary, something that is different from others of the same line of business. To give it these peculiar features requires experience, and the owner of The Astorian has engaged the services of such a specialist for the benefit of its advertising customers who may wish to take advantage of his services.

The Evening Star, of Washington, D. C., has an advertisement writer connected with its business department, and its terms to advertisers are, "So much blank space, so much money. The same amount of space, with the assistance of the advertisement writer in getting up ad. attractively, so much additional."

The Astorian charges nothing extra, the services of the expert being thrown in.

**GOOD** Food - - -  
Digestion - - -  
Complexion - - -

are all intimately connected - practically inseparable. Though the fact is often ignored, it is nevertheless true that a good complexion is an impossibility without good digestion, which in turn depends on good food.

There is no more common cause of indigestion than food. Let the bright house-keeper use

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COTTOLENE is clean, delicate, healthful and popular. Try it for yourself.

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FISH,  
HOT & COLD MEATS,  
GAME, WELSH-RABBIT, &c.

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*Lea & Perrins*  
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