

[Published by Authority.] COMMERCIAL STATISTICS.

Report on the Harbor and Shipping of the port of Astoria-Facts Important to the Public.

At a meeting of the Astoria Chamber of Commerce, held in May last, ' & committee was appointed to prepare statistics of the harbor and shipping of the port of Astoria, for use at "the Farmer's Convention. Following is the report in full.

Your committee to whom was referred the matter of harbor, and shipping intelli-gence, beg leave to offer the following:

The water front of Astoria, varying from a quarter of a mile to a mile in width sflords over six miles of secure anchorage for the largest classed vessels, in from six to twelve fathoms of water. No storms have yet visited the harbor that effected any damage to shi-ping riding at anchor in the bay, or lying at the wharf. Should the demands of commerce re-

quire, about five consecutive miles of dockage may be cheaply constructed from the river bank to the edge of the channel, piling being necessary but a short dis-tance at any given point.

The central portion of the harbor is just twelve miles inside the Columbia river bar, on which there is twenty-four feet of water at extreme low tide, and thirty-four at ordinary high tide. After crossing the bar, the depth holds still greater all the way to Astoria, so that any vessel able to goes can safely venture to our docks. About six miles above Astoria, at the com-mencement of Cathlament bay is the hog's "back, a bar some quarter of a mile in length, with ten feet of water at low and cighteen feet at high tide. This is the most dangerous point on the river, and the most skillful pilots never attempt its passage in the night, either with sail or steam. It is formed of shifting sands, deposited by the meeting of the tide with the annual freshets of the river, as Cathlamet bay is ten miles long up and down the river, and from seven to fourteen in width. Thus the waters of the river are so spread out that they lose their force, and the incoming tide washes the loose sand into irregula bars that change their position from year to year, and make dredging useles Steamers are nearly always detained a Astoria, for tide to cross this bar, and should one arrive here, say at 12 M. when high water occurred at 10 d'cleck A. M she would have to wait until 11 A. M. th next day, as she could not proceed on the high tide of the night. This bar has bee known for years, but as the draft of steam ers and vessels now coming into the rive is greater than formerly, the difficultie are becoming more and more apparent.

There is the following named depths of water at the points mentioned at hig tide:

Walker's Island, 19 ft.for 1/2 mile below Raini Carr's Woodyard above

A skip of 1,000 tons is worth. \$ 60,000 Interest at 10 % cent, and Insurance @ 12 % cent, four months Depreciation at 10 % cent Wages % month, for Captain \$150, two mates \$150, steward \$50, and 12 seamen at \$50 cent 4,400 2,000 at \$25 each 2,540

Stores for lo men at 5te ? day ... PORT CHARGES IN ASTORIA. Pilotage and towage, 19 feet \$8 @ 10 ...

LIVERPOOL CHARGES. Pilotage and towage, 19 feet @ \$10 Stevedore's bill@2%, harbor dues, tonnage dues and dockage

Port stores.

- CONTRA:-By 1,000 tons at \$15 Expenses deducted..... 11,780

the larger ship as against 5 per cent. on that of the smaller. Or, to reduce both to per cent., the 3,000 ton ship will carry wheat to Liverpool for over a third less than the 1,400 ion vessel; that is, 29 cents against 45 cents per bushel. Add to this the cost as above figured, incidental to delays and river expenses of 4 cents per bushel, and it gives a net gain of 20 cents per bushel in favor of Astoria as an exporting harbor, and the employment of such vessels as can safely cross the bar, over the present arrangement of Portland and 'small vessels. Twenty cents per bushel on the estimated crop of the State for 1873, viz: 5,000,000 bushels, gives the snug little sum of \$1,000,000 that the farmer should have for his labor. The above figures are all substantially correct, and tell their own story.

It may be said that several large vessels have leaded at Portland, but the Custom House records show that of the twenty vessels named below, comprising all the vessels of any size that have sailed from the river with wheat, from a fourth to over one-half of the cargo was brought down to Astoria in steamboats and here put on board. And yet these records are more favorable to the city of Portland than the facts justify, for the reason that in a number of instances, two or three hundred tons was cleared from the Portland Custom House as being on board when in fact it was in lighters and steamers glongside of the ship, and towed down te Actoria before being placed on the ves-

List of vessels exporting wheat from Oregon, showing amount of bushels taken on at Astoria and Portland:

CROP OF 1872.				
1872	Šhipe.	No. Bush.	No. Bush. Portland.	
Oet. 1 	 Annie M. Smull^o Manilla. Navigator. Electra. Lock Dec^o. Siam. Forward, (bbls of flour), Red Decr. Grasmere Kouave Naworth. Channel Light. 	15,229 7,359 7,734 8,754 7,175 1,758 10,177 20,052 34,667 2,305	42,462 14,621 20,622 222,177 38,453 26,667 3,200 26,501 223,575 22,400 17,170 21,755	
1873, Jan. 1 Feb. """"""""""""""""""""""""""""""""""""	 6. Victoria Nyanza⁵ 1. Whittington⁶. 8. Felix Mendelsohn⁶ 7. Sarah Scott 9. Roswell Sprague⁵ 	9,625 14,880 11,573 1,250 8,312	44,800 81,654 33,603 30,000 35,680 20,000	

of course there could be no rescue. It is safe to say that, had there been a tug at hand, every vessel thus far lost on the bar might have beed saved. Since the placing of the tug Astoria upon the bar, or pilot grounds in 1869, there has been no less, and with proper care on the part of tig and pilots, there need be none for many years to come. These facts warrant us in mak-ing the bold assertion, that there is no barr-960 166 200500 ed harbor known to commerce, where the percentage of loss is so small; and few, if any, open harbors that can show so fair a record. The currents and prevailing winds are such, and the land marks so 190 650 100 vessels bound out to anchor, and select from the spot their own time to pass out. Less trouble is experienced from fogs at the Columbia, than either to the north or south, as they are not frequent, and are much less dense, owing, no doubt, to the presence of arial currents, resulting from peculiar physical conformations. The channel is distinctly bouyed out, and lighted by a first class light-house on Cape Disappointment, where is established a life saving station by Government, with all the necessary facilities for rendering aid in case of accident on the bar. Government has also made an appropriation for a light house at Point Adams, and preparations are going forward for com-

> fore been taxed by underwriters far above the proper and reasonable rate. But, as the rate of insurance is made up from a knowledge of the actual pro rata of loss incident to a given harbor, when such data is to be had, or guessed at from gen-eral impressions, in the absence of reliable information, there seems no good reason why, if the above facts are laid before the various marine underwriters of the land, the discrimination against the Columbia river bar should not be removed, and our insurance had at a fair rate, much less than is now imposed.

would be the employment of home capital in the river tranportation, instead of foreign, or outside, as is now done. The question is now never raised about Sandy Hook bar, at the entrance of New York harbor, being too shallow and rough for the extensive and profitable employment of all classes of vessels, yet there is five feet more water on the Columbia river bar at high tide, than there is on Sandy Hook at a corresponding stage of water. But, to conclude, it is evident that the class of vessels required to carry the surplus products of Oregon to a foreign market, at a price consistent with the cost of production, must stop at the mouth of the Columbia river. Therefore, it is a simple problem of whether Oregon will build up and maintain a seaport town worthy of a great State, within her own borders, or whether such a place will be sustained on Pugut Sound, or California, at an annual cost of one-fourth the agricultural wealth of the State.



Kalama	4 1/	46
St. Helen 17 ft.	for 52	44
Mouth Wallamet "	.v. C*	**
Post Office	1%	65
Swan Island 17	14	14
en 1 1 1		1.1

The channel is often crooked, and difficuit of navigation, and the bar at the mouth of the Willamette river is subject to annual deposts of sediment from back water of the Columbia.

We find that the carrying trade of Oregon is now chiefly done by vessels of light draft and small capacity. That these are subject to a tax of \$8 per

foot draft as pilotage; from four to ten days' delay, and \$300 to \$400 tewage, over and above what they would have to pay, did they receive and take in cargo at Astoria. A fair average would be, say six hundred tons capacity. Expenses would then be as follows:

Pilotage 16 feet @ \$4 up	64 64
Six days demurrage @ \$60 Towage up.	260 175
• down	125
Total	\$788

Equivalent to over four cents per bushel on the cargo of 600 tons outward bound. This is but a fraction of the expense to the State growing out of present arrangement of the arrivals and depatures by sea. By careful inspection of the shipping

registers, we find the average draft of all vessels now in use, ranging between 1,000 and 1,200 tons, to be 20½ feet, and the average of all larger ones but 21½ feet. While a thousand ton ship is full larger than can reach Portland, or any point above &c., on or about the bar. Astoria, loaded, on account of depth of water, a vessel of 3,000 tons can always come to Astoria, whatever the stage of pilots, wind failed after getting in, and come to Astoria, whatever the stage of water. Thus, with a point higher up on the river, the export trade must forever be carried on in small vessels, while from here the shipping of the world may compote for freights.

A sup of 3,000 tons can carry wheat from Astora to Liverpool for twenty cents a bushel less than a 1,000 ton vessel can do from Portland, as the following figures fully demonstrate:

A whip of 3,000 tons is worth	\$120,00
Interest, at 10 % cent. for four months	1
(average passage)	
Insurance at 12 7 cent	
Depreciation at 10 % cont	. 4,00
Captain, three mates, steward, and cool	£
\$150, \$75, \$60, \$50, \$40, \$40 @ month	. 1,96
Twenty-four seamen @ \$25 % month	
Stores for voyage, 30 men at 50c # day	, 1,80
PORT CHARGES IN ASTOR'A.	101 1000
Pilotage and towage, 23 feet \$8 @ 10	. 20
Stevedores' bill, 3,050 tons @ 40c	. 1,20
Dannage	
Port stores, etc	. 20
LIVERPOOL SHARGES.	1
Pliotage and towage, 23 feet @ \$10	. 2
Stevedore's bill, 3,000 tons @ 25c	0 50
Harbor fees, tonnage dues and dockag	0 8

Phil Stores.	200	th
Total expense	22,465	-
- CONTRA:-		-
	22,510	li
Balance	22,510	R

35,680March S Hione. 9.035|30.03910 Carribou. 7,705 32,683 442 14 Victoria Gross...... 3,828 24,842 Again, deep sea vessels never like to leave the salt water. Coasters are willing

to steamboat it, but large vessels avoid steamboat grounds. In fact, the underwriters do not allow deep sea vessels to venture from their natural element 'at

The striking of a vessel on any of the bars of the river, even if no immediate damage is discovered, is sufficient cause to render null and void the policy of insurance, should she take in cargo and proceed to sea without being put on the dry

dock and having her bottom examined. Should a ship be lost under such circum-stances, not a dollar of insurance could be collected on the vessel, and if the owners At The Old stand of were responsible, the underwriters upon the cargo would hold them for the value thereof. Hence large vessels will never be induced to undertake the navigation of the bars of the Columbia above Astoria.

Now as to the safety of the Columbia river. Exact data is wanting of the whole number of vessels that have crossed the bar, but from certain periods during which the data is complete, we are enabled to approximate very closely, and set the number down at an average of five hundred a year for the last twenty-one years, or since 1852. The following is a com-plete list of all the losses or wrecks that have occurred on the bar since 1852, which year may be considered the beginning of wisdo: as regards the channels, currents,

they drifted ashore.

Bark Oriole, lost September 19th, 1853. Brig Detroit, lost Dec. 22, 1855, on outer P. E. FERCHEN. C. S. WRIGHT, Agent.

spit. Going out at night. Bark Desdemona, Jost Dec. 31st, 1856. Came in without a pilot, ran on sands six miles inside.

Schooner Woodpecker lost May 10, 1861, four miles inside.

Bark Industry, lost March 16, 1865, coming in without a pilot. Bark W. B. Scranton, lost May 5th,

ping coming into the river.

Of this number, four were coming in without pilots. It futher appears that nearly every loss during the time under reveiw, was the result, not of a reugh bar, but of the wind failing after the vessel had crossed thus leaving her to drift on the sands. It also seems that each loss of vessels coming in occurred when they were sailing against the tide, instead of with it. There being notug to go to their relief,

Vessels marked thus (?) are known to have shtered mere than the amount eredited bove.