

AN OPEN RIVER TO THE SEA.

What It Means to the People of the Great Inland Empire.

BENEFIT IT WOULD BE TO PORTLAND

All Are Mutually Interested in Its Accomplishment—Facts for the People to Consider.

Written for the East Oregonian.

I. THE COUNTRY.

No subject is of so great general interest to all the people of Eastern Oregon and Eastern Washington as that of an Open River. For many years it has been discussed continually in the press, in the legislature, in local conventions, and by our representatives in congress, and yet the practical results are as yet small, to many appear to be nothing; but there has really been some progress, and there are some favorable indications for further and better progress in the years to come.

To the home readers of the EAST OREGONIAN, the reasons why an open river is so much desired, and the nature and extent of the benefits to be derived are an old-tale, with which they are perfectly familiar; but for the benefit of readers at a distance a brief statement thereof may be of interest.

THE COLUMBIA BASIN.

The Cascade range of mountains, extending from north to south through Washington and Oregon, divides these states into two regions, about two-thirds of the area of each lying east of those mountains. Of this Eastern Oregon and Washington region, a large portion is sometimes known as the Columbia Basin, being all the country drained by the Columbia river and its tributaries, from the British Columbia line to the place where the great river of the Northwest breaks through the Cascade mountains. This great area, undoubtedly once an inland sea, and afterward overflowed with lava, in places to a great depth, has since its first settlement been at a great disadvantage as to facilities for the transportation of its surplus products. Originally these products were confined chiefly to stock and wool, and the inconvenience and loss was not noticed so much, nor was it nearly so great, as in later years, when grain, particularly wheat, began to be raised in large quantities for export. With the rapid increase of settlement and cultivation of this region came the constantly growing necessity for better facilities and cheaper rates to the seaboard. Prior to 1883, the then comparatively small surplus from the country tributary to the Upper Columbia was shipped by boat to Celilo, thence eleven miles by rail around a series of obstructions to The Dalles, thence by boat again to the Cascades, then six or seven miles by rail again around other obstructions, then by boat again to Portland, then transferred to ships bound for Liverpool, and these could often be only partially loaded at Portland, but a portion of their cargoes must be towed to Astoria on barges and the ship's load there completed. Thus the wheat, wool, stock or other produce had to be handled six or seven times, after it was first placed on a steamer in the Upper Columbia, before it was put aboard the ocean steamer, and that in a distance of from 200 to 500 miles from the ocean.

RAILWAY RATES.

In 1883 the "Oregon Short Line" branch of the Union Pacific railroad was completed, traversing and tapping a small portion of the fertile belt of Eastern Oregon and following the belt of the Columbia down the river to Portland. This line after that largely superseded the old method, and obviated the use of three boats and two portage roads; but the freight rates were still kept enormously high, being, for example \$6 per ton for grain from Pendleton, 230 miles (afterward reduced by the inter-state commerce commission to \$4.80 per ton), and \$3.40 per ton from The Dalles, 87 miles to Portland; and other charges in proportion. Later the Northern Pacific tapped other portions of the Columbia basin, furnishing an outlet by rail for its surplus products over the Cascade mountains to Tacoma, but its rates were equally burdensome. Hence as the country has become more and more thickly populated from year to year, and its grain and other products have steadily and largely increased, the cry for an open Columbia river has become stronger and more clamorous and insistent, until now it is the one great, universal, imperative demand of the tens of thousands of "Inland Empire" toilers.

EXPORTS AND IMPORTS.

The magnitude of the interests at stake cannot be accurately measured or stated, but they are almost beyond comprehension. The surplus wheat of Eastern Oregon and Washington naturally tributary to the Columbia river is this year probably not much if any less than fifteen million bushels. Of wool there is exported annually from the same region in the neighborhood of twenty million pounds. Great quantities of live stock and some other products are also to be carried from the country, and most of the merchandise for some 350,000 or 360,000 people into it. An open Columbia river would greatly lessen the cost of carrying this immense aggregate of exports and imports to an extent not possible of exact calculation, but probably not less than one-third. On this year's output of wheat alone, sup-

posing the average rate from Eastern Oregon and Washington to the seaboard by rail to be \$5 per ton, this one-third reduction would amount to \$750,000. Enough other products are exported to increase the figure to a million, and the reduction on imports may safely be estimated at one-half as much more, making a total of one and a half million dollars annually saved to the producers and shippers of the Columbia Basin in one year by an open river. Of course these figures represent only a crude and general estimate, but they are doubtless rather under than over the truth.

But this is not all. Below Portland, and before the surplus products of Eastern Oregon and Washington are able to reach the highway of ocean, they are subjected to another heavy charge for pilotage and towage from Portland to Astoria, amounting to about one dollar per ton, or three cents per bushel, on wheat, and other things in proportion, owing to obstructions in the Lower Columbia. Here is another annual burden on the Columbia shippers of probably another million dollars.

BENEFITS TO BE GAINED.

But the estimate of the ultimate loss cannot stop here. If under these burdensome and discouraging conditions the population and products of the Columbia region East of the Cascades have increased, what might the increase be if half or even one-third the burden were removed? Five or six cents a bushel—yes, with a deep ship channel from Portland to the sea at least eight or nine cents per bushel more for wheat, and a correspondingly greater price for other exports, with also a corresponding decrease in the cost of imports by way of the Columbia river, that ought to follow, would encourage settlement, stimulate cultivation, double and triple in a few years the aggregate production, make better farms of those in existence and new farms of lands as yet untouched, populate the country and with it the principal towns until there would be justification for and safety in the establishment of local manufactures; would in short release the people of that great and in many respects favored region to such an extent that they would bound forward on the lines of development, progress and prosperity more in five years than they have been able to do in twenty years past. The cost of transportation operates directly upon them as a clog does upon the feet; lessen the weight of the clog one-half, one-third, and notice how much faster one can run, nay, and how much easier.

And what helps one helps all, as a rule. Not all portions of the Columbia Basin would be equally benefited by an open river, but directly or indirectly all would receive some benefit. That the charges for transporting produce and merchandise between Portland or the seaboard and points of Eastern Oregon and Washington have been unreasonably large or at least much larger than they would be if water competition was afforded, is well known, evidence of this is before us in the comparative charges here and for similar distances in other parts of the country, and even along the Willamette Valley in our own state. We also have the evidence of what the building of the portage road and the opposition boats are doing for the people tributary to The Dalles and other points below that city.

Estimating the amount of wheat shipped from these points at a million bushels, a moderate estimate, the saving on this one item alone is \$36,000 annually. The rate on wheat from The Dalles to Portland by the Union Pacific line is \$3.40, by the new route \$2.30, a difference of \$1.10 per ton or 34 cents a bushel. But this reduction applies to all shipments, both ways, of which, through a year, wheat will not form over one-third. Hence the saving to the comparatively small number of people directly benefited by the new line will be over \$100,000 annually. What it would be to all the people above The Dalles, if the river there was opened, can only be estimated, but, as before stated, it will readily be seen that it would be a very large sum annually, enough in a few years to pay off all county and other public indebtedness and a multitude of mortgages besides.

It is true that portions of the grain producing country is not immediately tributary to the Columbia, but are situated too remote to admit of wheat and other produce being hauled by team directly to the river; the greater the distance the less the immediate accruing benefit; but this disadvantage would soon be obviated by the building of competing lines of railway from the river into the interior, and by "appropriate legislation" as to local freight charges; so that directly or indirectly the people of all of Eastern Washington, Eastern Oregon and Northern and Central Idaho would reap the benefit.

THE ARABLE AREA.

Again speaking briefly for the benefit of "foreign" readers, it may be stated that this is a region of a vast extent and of more varied productions and resources than one not familiar with it would imagine. Not all of it is agricultural land, but such of it as is is fertile, and of this there is enough to support ten times the population by which it is now inhabited. The agricultural lands of the Columbia Basin have been divided for the purpose of descrip-

tion into three sections. The first is bounded by the Cascade mountains on the west, the Crooked river on the south, the Blue mountains and the watershed of the John Day river on the east, and the Columbia river on the north. This division embraces about 15,000 square miles of territory, a large portion of which is arable. The second division includes all that part of Eastern Oregon lying between the Blue mountains and the Columbia river, all that part of Southeastern Washington lying south of Snake river, and extending into Central Idaho. This area is about 10,000 square miles, and much of it is extremely fertile, often producing as much as 30 or 40 bushels of wheat per acre, and all other grains, vegetables and fruits, adapted to the climate, which is as mild as that of Ohio. The third section is in Washington north of Snake river, and is known as the Palouse country, and contains over 2,000 square miles of territory, all of extreme fertility. Of this 15,000,000 or 16,000,000 bushels of wheat to be exported this year, nearly one-half will go over the Cascade mountains to Puget Sound, while with an open river nearly all of it should and would come down the Columbia.

II. THE OBSTRUCTIONS.

Having thus given a very brief outline of the reasons why an open river is desired, and how it will affect the people of Eastern Oregon and Washington, I desire to present, in as full detail as your limited space will allow, some facts and figures in regard to the different obstructions to be overcome, the various plans for obviating them, what progress has been made so far and what the prospects for the future are. For this purpose I will begin at the mouth of the Columbia, and follow it up.

THE COLUMBIA BAR.

The first obstruction to Columbia river commerce, one that has been encountered since its discovery, has been the Columbia river bar. This obstruction and the danger it presented, have been much exaggerated by papers published in rival parts, yet they were not wholly imaginary. While experienced seamen there was ordinarily never much danger in crossing the bar, yet there was frequent delay and expense, and while shipmasters did not badly fear it yet they disliked it, and other things being equal or nearly so preferred to make some other port than Astoria and Portland. The worst feature of this initial obstacle was the fact that before the beginning of the present work the channel or channels—for sometimes there were several of them—over the bar were very capricious and changeable in location and variable

during the year ending July 1, 1892; and it is also estimated that \$525,000 more will complete the work. The whole estimate for the work at the beginning was \$3,710,000, so that it will be seen that for once at least the expenditure has fallen within the estimate; and what is better still the work has undoubtedly been accomplished, or in a year or two more will have been accomplished, all that it was planned or expected to do. It has made a deep, well-defined and permanent channel, or will have done so by the time another appropriation is expended, and the waters of the Columbia have moved out to the ocean in their thus contracted space for a few months longer. The bar is no longer a terror, soon will scarcely be an inconvenience; and thus the first foe to Columbia river commerce has been subdued. I give this favorable testimony to that splendid work of the engineers all the more cheerfully because so much cannot be said of some other projects—and thereby hangs a tale, or at least an inference, a suspicion—but I will come to that in due time.

THE LOWER COLUMBIA.

Next I will speak of the Lower Columbia and Lower Willamette, between Portland and the ocean, in which there are various shallow places, offering obstruction, not of so serious or positive a character as those at the Cascades and The Dalles, yet sufficient to impose a heavy burden upon the Columbia producers. The railroad terminating at Portland, the wheat that comes down the river by rail, or that would come down by water if the river above Portland was free, must be loaded on sea-going vessels in Portland. But owing to these shallow places and bars, a portion of most full cargoes must be transported on lighters to Astoria, and there re-shipped on the outgoing ship to complete its cargo at a heavy cost to every ship coming to Portland to load, which is finally a direct burden upon the producers.

There are a number of these bad places, the worst being three in number, namely, at Walker's Island, Postoffice Bar and at St. Johns. This portion of the Columbia has also been the object of federal appropriations, almost every year since 1866, the appropriations for the several years being as follows:

1866.....	\$ 15,000	1867.....	\$ 20,000
1868.....	21,000	1869.....	15,000
1870.....	3,000	1871.....	50,000
1872.....	20,000	1873.....	20,000
1874.....	20,000	1875.....	20,000
1876.....	30,000	1877.....	45,000
1878.....	30,000	1879.....	45,000
1880.....	45,000	1881.....	45,000
1882.....	100,000	1883.....	100,000
1884.....	70,000	1885.....	100,000
1886.....	100,000	1887.....	100,000
Total.....			\$800,000



PUBLIC SCHOOL BUILDING AT PENDLETON.

in depth. The depth in the best of them was usually from 19 to 21 feet, and they varied in number from one to three.

The present project for the making of a definite and permanent channel over the bar was adopted in 1884. It can be explained the providing of such a channel as should have a depth of 40 feet at mean low tide. This was to be effected by concentrating the water flowing over the bar and increasing the resultant currents to such an extent as to procure and maintain by that means the desired depth. This was to be done by building a low-tide jetty from Fort Stevens on South Cape, extending in a westerly direction, with a slight curve to the south, out across Clatsop Spit, a distance of about four and one-half miles, to a point about three miles south of Cape Hancock (or Disappointment). The jetty is constructed of stone, resting on a mattress foundation about forty feet wide and from two and a half to five feet thick. The stone extends upward to the level of mean low water.

SUCCESSFUL WORK.

The effect of this jetty, as expected, was to build up Clatsop Spit and concentrate the ebb waters upon the middle sands of the bar. These have been entirely removed, and where they once existed there was was over a year ago from 18 to 25 feet of water, which has since increased.

The appropriations made for the jetty work at the mouth of the Columbia have been as follows:

1884.....	\$100,000
1885.....	187,500
1886.....	500,000
1887.....	5,500
Total.....	\$1,332,500

The amount available on July 1, 1891, was \$496,451.86, about all that it was estimated could be profitably expended

by Portland capitalists, and the work will begin soon and be pushed to a speedy completion. It is doubtful if the \$500,000 will do the whole work, but it will better the worst places, and with the aid of such appropriations as the government will probably make, the 25 foot channel will undoubtedly be an accomplished fact within the next two years. Indeed it is expected that the worst difficulties will be materially lessened by next fall.

ALL INTERESTED.

The reason that I have mentioned the Columbia bar and the lower Columbia at this much length need scarcely be stated, for it must be obvious to all Eastern Oregon producers and importers, tributary to the Columbia, that these obstructions are really as much of a damage to them as obstructions of equal magnitude would be at the Cascades or The Dalles. To make the river open to Portland would be of small advantage, unless it is open below also, to that great highway of all nations, the ocean. The extra cost of transporting whatever the Wasco or Umatilla or Walla Walla county man exports or imports, via the Columbia, caused by these impediments, falls upon him just the same whether he is at the mouth of the Columbia river, or 100 or 200 miles inland. Portland, of course, has an especial interest in opening the lower Columbia to the free and unimpeded navigation of ships of the first class, because it wants to make itself a first-class seaport, as well as the railroad, commercial and financial center of the Northwest; but while it is benefiting itself in the expenditure of the \$500,000, it is also directly benefiting all the people of the upper country who export or import by way of the Columbia river, either by water or rail, above Portland.

THE CASCADES. F. E. N.

The next, and a still more formidable obstruction to the Columbia, is at what is known as the Cascades. Here the government has been at work, or proposed to be at work, for about fifteen years. The general scope of the improvement which the canal and locks at the Cascades are designed to effect covers about four and one-half miles in length, where the river rushes through a narrow gorge in the Cascade mountains. The fall in the distance is 45 feet at high water and 36 feet at low water. The worst obstruction occurs at the upper end of this reach.

known as the Upper Cascades. This is to be overcome by digging a canal 3000 feet long across the neck of a low, projecting spur, and building a lock to permit the passage of a boat in twenty feet of water. Below the Upper Cascades the work consists mostly of removing boulders and projecting points, sufficiently to also give a depth of 2 1/2 feet of water. The difference of level between the head and foot of the canal as now established is 15 feet at high and 24 feet at low water. The difference in the light between high and low water at the foot of the canal is 54 and at the head 45 feet. The east part of the work, that of improving the river below the foot of the Upper Cascades, is essentially finished. The appropriations for the work have been as follows:

1876.....	\$ 30,000	1878.....	\$150,000
1879.....	100,000	1880.....	100,000
1881.....	100,000	1882.....	200,000
1883.....	150,000	1884.....	100,000
1885.....	300,000	1886.....	425,000
Total.....			\$1,675,000

PROSPECTS OF COMPLETION.

It is estimated that with sufficiently large appropriations the work can be completed in two years, but if it progresses as slowly in the future as it has done in the past it will take several years beyond that to finish it. Last year the engineers estimated that \$1,115,000 would finish the work, and that \$900,000 of that could be profitably expended during the fiscal year ending June 30, 1892. They only received \$435,000 of that, so that the estimate to complete, unless changed, would now be only \$680,000. Undoubtedly, as in most cases, this will be found too low, and there is no reasonable prospect of a completion of the canal and locks before 1894 or 1895. No one but an engineer may be able to speak critically and with exactness of such a work, but it scarcely needs an expert to safely make the assertion that the work was badly planned and has not been well managed. It is certain that the plans contemplated a work of far greater magnitude than was necessary, and that from lack of money when it could be used to best advantage or from other reasons it has been veritably interrupted and delayed. I estimated a while ago that there might be some reason why the work at the mouth of the Columbia had progressed so rapidly and succeeded so well, being constructed with even less money than the estimates required, while this had been so disappointing.

THE RAILROAD'S INFLUENCE.

I do not know the reason; I do not know the baleful influence that has

brooded all these years over this Cascade gorge and apparently partly paralyzed that great work, intended to unshackle one of the fetters upon the commerce of the Columbia river region, but we all do know that while the Union Pacific railroad had an interest in having the Columbia river bar improved, it had a stronger interest in preventing the improvements above Portland, to which point its line extended; and we also know that railroad influence has been potent for many years at the national capital. The Northern Pacific has also a large though a less direct interest in the same direction. It has no parallel, competing road as the Union Pacific has, but once upon the river and thereby force down the Union Pacific's rates, and the Northern Pacific would at once have to make the same rate from all competing points both to Portland and the Sound. Hence while no specific charges can be made, it is natural and reasonable for the suspicion to be entertained that during all these years the potent influence of these great corporations has operated to delay and impede this great work. Had it not been for this influence, brought to bear somewhat, however, many people believe that the plans would have been carried out in the first place, and that the canal and locks would have been done five years ago. I have already shown how the building of the portage road and the opposition to its have affected the Union Pacific railroad in the comparatively small region of country tributary to the Dalles; what wonder, then, that these corporations should fight to the uttermost the opening of the river both there and at the Cascades. They are not censureable in this; they are looking out for themselves; any company or man could do the same; but the moral of it is that the people must look out sharply for themselves too.

THE PORTAGE ROAD.

They had friends who did this well for them in the last legislature when they secured the passage for the bill, providing for the building of the portage road around the uncompleted canal at the Cascades. This good work was supplemented by the action of the brave and public-spirited business men of The Dalles, who almost unaided, built the two boats, the "Regulator," to run above and the "Dalles City" below the portage road, and they and all the people who come to The Dalles, to buy or sell, to trade or travel, have already reaped a goodly harvest from the joint action of the legislature and of the people of The Dalles. I diverge from the subject here sufficiently to say that this enterprise on the part of those men is worthy of all commendation and of imitation in other places. They made their money talk. It was prophesied that the Union Pacific would run them out; it has tried to, and it has managed to secure a large portion of the freight, but The Dalles men were not to be bluffed or scared; and if they haven't made much money they have saved tens of thousands of dollars to the people of that region, giving the town a greatly increased trade, and brought about a prosperity in which they have shared.

THE DALLES.

But at this point, The Dalles, the river is again impeded. Between there and Celilo there is a reach of about twelve miles of interrupted navigation. In the vicinity of Celilo there is a fall in the river, at low water, of 47 feet. Three miles below are the 10-mile rapids, one-half a mile long, with a low water slope of seven and a half feet to the mile. Lower down are The Dalles rapids, one and a half mile in length, with a fall of ten feet per mile. The total fall in the reach is 51 1/2 feet at low and 62 1/2 feet at high water. Three plans have been proposed for operating these obstructions, namely, canal and locks, a boat railway, and a portage railroad.

There has been an unfortunate disagreement as to which of these plans should be pursued, and also, a portage road should be built by local enterprise, on which side of the river it should be located. The river and harbor act of August 11, 1888, directed the secretary of war to appoint a board of three engineers of the United States army to thoroughly examine the obstructions, and to report as to the feasibility and advisability of overcoming them by means of a canal, a railway, or the Dalles rapids and Celilo falls, and advising to a navigable strait for large tonnage river boats the channel of the river at three and ten-mile rapids. The engineers, on December 18, 1888, after discussing various projects, reported that a single track portage railway, to cost \$431,000, and that could be constructed in one year, would be the cheapest and quickest solution of the difficulty. But recognizing the objections to the transportation of freight, and realizing that such a road might not be adequate for future requirements, the board prepared a report on the second project, the boat railway, and recommended it as a final solution of the question. In other words they would first build the portage road, as a means of at least temporary relief, then go to work on the larger and more experimental job of a boat railway.

THE BOAT RAILWAY.

The plan of this was to take the boats from the river at the foot of The Dalles rapids, and return them to the river at the head of Celilo Falls, by means of hydraulic lifts, one at each terminus, transferring them over the intervening distance, a little over eight miles, by a railway. The estimated cost of the whole system with an equipment of two cars and four engines, capable of passing eight boats of 600 tons weight each in each direction every twelve hours, is \$2,690,356.35. Further estimates were made as to the cost of transporting more boats, and of the maintenance of the system, which for sixteen boats every twelve hours would be \$60,000 annually.

The third project, canal and locks, was recommended by Major Handbury, the local engineer in charge, and was esti-