Columbia River Traffic

Analysis of Vast Changes in Prospect as Result of Opening of Columbia River and Panama Canal-Effect on Inland Empire The Huge Undertaking at Celilo-Effect of Improved Waterway on Shipping Rates





HE people of the Northwest are usually credited with foresight and sagacity. But it may be questioned whether more than a small fraction have yet formed any adequate conception of the vast chapges im-

pending through the Panama

and the inauguration of water traffic between the two sides of the continent. The possibilities of commercial derelopment in aif parts of the Pacific Coast are untold, but in some respects those of the Columbia River region are

of an inhabitant of the Inland Empire the opening of the Columbia River carries an almost equal suggestiveness with that of the Panama Canal itself. The combination of the two canals conveys a suggestion of commercial changes equal to those of the first transcontinental railways.

The fact is, we, of the Northwest, are on the threshhold of a new spoch. Whether we gain or lose individually by this new epoch depends on the degree of intelligence with which we adfust ourselves to it; but there can be ne question that there is a new page fast turning in the momentous records of Pacific Coast history.

Rather I ask the reader's attention to present and forthcoming conditions of water traffic by the Columbia River to the vast interior regions of Oregon, Washington and Idaho.

Entrance of the Steamboat. It was a great step in the history of this country when, in the '60s, the O. S. N. Co. instituted water transportation from Portland to Lewiston and other points on the Snake and Colum bia rivers. That was the age of gold; a dazzling period of adventure, enter-prise and rapid fortunes. The steam-boat provided the only means of en-trance and the proverbial pilot of those days could run on a heavy dew. The captains never thought of low water, but plunged right into the teeth of rapids and reefs daring all And it was worth the daring.

It is reported that the Tenino, leav-

It is reported that the Tenino, leaving Cellio for Lowiston April 25, 1882, had a passenger list of fares amounting to \$10.545. On a subsequent trip her receipts for freight, passengers, meals and berths footed up \$18,000. The O. S. N. Co. was capitalized on December 20, 1860, for \$172,500. Yet from its proceeds it expended nearly \$2,000,000 in betterments, paid to its stockholders over \$1,500,000 in divisteekholders over \$1,500,000 in divi-dends and sold out to the Villard Syn-dicate in 1873 for \$5,000,000. In 1863 freight from Portland to

Wallula was 150 per ton; to Lew Walfula was see per ton; to Lew-iston \$30; while passenger fares were \$18 and \$23. That was a great age, but it passed on and an age of rail-way development, farming, fruitrais-ing, city building, "booming," suc-ceeded. So the glory departed from the river and the steamer was rele-mental to the honovard.

In 1895 the canal In 1895 the canal at the Cascades was completed and the Columbia region as far as The Dalles became

This effected large and beneficent vast Inland Empire and hence benefits were limited. Some conception of the results on freight rates may be gained from the fact that the sugar from Portland to palles fell from \$4.20 per ton to \$2.20 per ton, as soon as the Cascades canal was finished.

During all the time following completion of the canal at the Cascades

it has been apparent to observing men that results of untold benefit to the inland Empire would follow the com-pletion of a canal at Celilo Falls and the Grand Dalles. For such a causal would overcome the only serious ob-struction between Portland and Priest Rapids on the Columbia, 222 miles and Rapids on the Columbia, 322 miles and Lawiaton on the Snake, about 375 miles from Portland. It would institute an era of water transportation, for the logic of such water rates is to reduce rail rates to the water level. Statistics show that the average rail rate in the United States is 1.63 miles per ton mile, whereas on the Great Lakes is 1.60 mile, whereas on the Great Lakes is 1.60 mile, and mly 78 mills per ton mile, and Ohio River, if estimates of en-age correct, it will become, ith completed improvements, as low

823 as half a mill per ton mile. A little figuring would easily show that the annual savings to the Inland Empire A little . would amount to millions, enough, in fact to pay for the Celilo Canal within two years or less.

By reason of the heavy railroad tariff under which the Inland Empire has rested the construction of the Cellic Canal and other improvements on seven-foot channel at all seasons to Priest Rapids and at least a four-foot channel to Lewiston, has been one of the special demands of our section Congress. Various propositions have been broached by engineers. At one time a ship railway was favorably considered. Then the plan of two ca-nals, one around the Cellie Falls and one around the Grand Dalles.

utilizing about five miles of good river between was decided upon. Further reports of engineers led to the decision to make a continuous canal from the head of Cellio Falls to

canal from the head of Cellio Falls to the Big Eddy.

That plan was accordingly adopted in March, 1905, and has been pursued since. The work dragged somewhat at first, as Government jobs are wont to. But in 1910, through the influence of the general public awakening deto. But in 1910, through the influence of the general public awakening, de-veloped by the National Rivers and Harbors Congress and through the constant efforts of the Northwest dele-gations in Congress, as well as the efforts of various private citizens, an ap-propriation of \$3,600,000 was secured to be paid in six annual installments. The total estimated expense is \$4,845. 600, and the existing appropriation is considered enough to complete the

A recent visit was made by the writer for the purpose of ascertaining the conditions and prospects of this great work. Major J. J. Morrow, of the United States Engineer's office at Portland, has general charge, with Lieutenant H. H. Hobert, as local man-

It is apparent that the work is in good hands, and Major Morrow and Lieutenant Robert offer every courtesy and assistance to those desiring infor-

Inspection of the work shows that it is in excellent progress. Two large contracts for canal construction were made, one of 25% feet, now completed, and one of 14,000 feet completed, except the cement facing. The present work is being conducted directly by Government and with highly satisfactory results. Major Morrow estimates that about one-third of the work has been done. More was accomplished during done. More was accomplished during the past year than in any three years before. Seven hundred men have been employed, and the number may be in-creased, if funds justify.

I found the work in progress at various points simultaneously, the aim being to get the cuts and fills outlined. being to get the cuts and fills outlined the entire distance and thus work the largest force to the best advantage. The heavy rock work is at the middle and the two ends, a considerable part of the intervening spaces consisting of concrete embankments through the sand. There will be used about 200,000 galloms of concrete in this part of the work. The finest kind of steam shovels are in use. At one point 1 of the work. The thest of the country shovels are in use. At one point I saw a Vulcan with an arm 60 feet long by which the huge scoops of the shovel can be deposited so far from the edge of the excavation as to more than double the working capacity over one of ordinary size.

As now outlined the canal will be eight and a half miles long. 65 feet wide at the bottom, eight feet deep, and with several basins for passage ways, 100 feet or more in width.

Five locks are provided, though only three will be used in ordinary water. At the lower end, opening into Big.

Eddy, from which there is an unobstructed passage way to the ocean, 200
miles distant, are the tandem locks,
by which boats may be lifted 78 feet.
At Five Mile Rapids, about two miles
above, is the next lock, with a lift of
11 feet. In any except extreme high
water, this lock will place a boat at
the upper level, and it can then proceed through the remaining six miles
directly into the Upper River. For use
in very high water, two more locks will
be made, one at Ten Mile Rapids, and
one at Cellio Falls.

This company was the off-spring of

It is a beautiful piece of engineering

It is a beautiful piece of engineering and to all appearance the work is of the hest character. Major Morrow says that with an appropriation of \$1,600,000 a year the canal could be open within three years; or with \$1,500,000, within two. This situation evidently offers a great inducement to us in the Inland Empire to bring every pressure possible to bear on Congress to add to the appropriations. The gain will be worth the effort.

Do all of us appreciate what this sig-nifies? Consider for a moment what such a reduction of freight rates would mean to the Inland Empire. Probably within five years there may be \$0,000,-900 bushels of grain for export. A re-fuction of 5 cents a bushel on an aver-

duction of 5 cents a bushel on an average might reasonably be expected.

There would be nearly a third of the total cost of the canal saved in that one item. Come to consider the saving on up-freights (in which the saving will be much greater per unit than in the outgoing grain), and it can readily be seen that a single year's saving will nearly pay for the canal.

Then there is another item of the utmost moment: electric power. The canal will offer a drop of 39 feet in two miles. There is nothing to prevent the constant utilization of power from all the water that can be admitted. In fast the whole force of the Columbia River can utilizately be employed at this point for the creation of

ployed at this point for the creation of It is likely that 100,000 horsepower could be developed here with but a fraction of the force of the river, and that amount of power, rented at \$15 per horsepower, (half the rate now prevailing at Walla Walla), would amount to \$2,500,000 a year. That will not be realized at once, of course, but it is one of the Orters possibilities.

Tremendous Flow of Water. The scene of this great canal work is a strange place on the Columbia. The whole enormous flow of the great river, which ranges from 100,000 secmore at high water, is compressed into a channel at Five Mile Rapids of but 165 feet wide at low water. It has never been satisfactorily sounded, but it is believed to be deeper than it is

it is believed to be deeper than it is wide, probably 200 or 400 feet. Probably the walls overbang.

At the Big Eddy, where there is greater width, the depth ranges from 100 to 160 feet. One object of special interest at Cellio is the Great Northern bridge. Teading to the Deschutes branch. It is partially completed \$8.50. bridge, leading to the Deschutes branch. It is partially completed and will be one of the greatest bridges in the country. It crosses the river just below Cellio Falls.

below Cellio Falls.

One thing of peculiar interest is the effect of the completion of the canal, and specially the united effect of its simultaneous completion with the Panama Canal, on railroads. Some affect to thing that the canals will be detrimental to railways and that railway manages must necessarily consecured. mental to railways and that railway managers must necessarily oppose canal construction. Some railroad men have, in fact, shown an unfriendly spirit, but the larger and more statesman-like of them realize that the ultimate interests of railroads run parallel to those of the public, and that added business and wider opportunities for feeder lines will result from the general diminution of rates. In the and they will gain more than they will lose. than they will lose. But there is another series of con-

AT LOWER END OF CANAL

This company was the off-spring of the Open River propaganda of a few years ago, which secured also the construction of the Oregon Portage R, R. from Cellio to The Dalles. The company has had many misfortunes and unforeseen obstacles, but has persisted, and is now making a triomphant sucand is now making a triumphant suc-cess. Several years ago, Senator Bur-ton, then chairman of the House rivers and harbors committee, gave J. N. Teal and others to understand plainly that he would not favor appropriations for our rivers unless we could demonstrate that they would be used, if improved. As a consequence, Mr. Teal and others courageously set to work to make the demonstration. Suffering some losses as ploneers of this second era of steam-boats, they have steadily widened and strengthened the scope of their operations, until it has become obvious to shippers and to railway managers and to students of commerce that here has been unobstrusively growing up a fac-tor in traffic which is the herald of a new day in the life of the Celumbia River country. Under the influence of the ability and indefatigable energy of Captain W. S. Buchanan, the super-intendent, and W. S. Smallwood, the general manager, the Open River boats have this year done a larger amount of business than ever before, and have offered such rates and service to shippers as to produce a new trend in

Work of Open River Bonts.

They are now running the J. N. Teal from Portland to The Dalles, making three round trips a week. They are almost constantly obliged to reject freight, while passengers crowd the

steamer. From The Dalles to Cellio the traffic is carried around the line of the canal by the Portage Railroad. It will surprise those not familiar with condi-tions to know that the Portage Rail-road handled in 1909 25,482 tons of freight, valued at \$1,023,165-no mean

pire runs to Pasco and Kennewick and intermediate points, and usually once a week to Priest Rapids and other points above Pasco. The distance from Cellio to Priest Rapids is about 210 miles. Boat service on this run is maintained substantially throughout the year. The Twin Cities runs from Cellio to Lewiston. 185 miles, from February to August, the water during low stages not being sufficient.

Although these boats are primarily designed as freighthouts and though

lesigned as freightboats and though the scenery from Pasco or Lewiston to The Dalles hardly compares with those forever-new scnes of grandeur and beauty seen from the decks of the Teal yet that trip on the Upper River is one of rare attractiveness. Nor is the trip so slow as might be

expected. Down the river they make nearly railroad time, or would if the large amounts of wool and other freight did not cause stops. But to a student of traffic these stops are among the most interesting experiences of the

journey.

But now the point of greatest value in regard to the Open River boats is their freight rates, the effect of them on railroad rates, and the foreshadowing of the new era.

Although the necessity of transporting everything around The Dalles on

the portage railroad causes delay and expense, the present freight tariff on the Open River boats is only about 70 per cent, on an average, of the railroad tariff to Pasco, Kennewick, Lewiston and other points. This is a general statement. Some specific examples will be of interest.

Some comparative rates by rail and by boat from Portland to Lewiston are the railroad are more likely to offer.

other classes, and from that point on the all-rail rates are lower.

Figures clearly demonstrate the fact that within a somewhat irregular the hands to hold the food and refuse to convey it to the mouth as for Spokane. It would be as foolish for the hands to hold the food and refuse to convey it to the mouth as for Spokane.

Some ecomparative rates by rail and by boat from Portland to Lewiston are the railroad are more likely to offer storping to produce and grow and

Sav. by boat \$0.45 \$0.40 \$0.25 \$0.17 \$0.12 Sav. per ton \$0.50 \$5.00 \$5.00 \$2.40 Average savings per ton, \$5.56

to 40,000 pounds on rail.
On the following commodities the comparative rates per hundred are as

\$0,06 down by the boat rate. Perhaps the most remarkable figures on down freights are on wool. The bulk of the wool, amounting to millions of pounds and destined to New York and Boston,

the rate on unscoured wool in sacks is as follows, per hundredweight:

made on wool, what will it be when both canais are completed? May we not reasonably expect that freight rates will be cut to half or less of the present rail rates to the great manu-facturing cities? What will that sig-nify to general prosperity? There is yet another feature of the

There is yet another feature of the comparative rates, and that is the rates by combination of boat and rall to points not immediately on the rivers. This is the most important aspect of it all, for if the rates to such points could not be lowered, the general agregate benefit would not be great, since the towns directly on the rivers

by hoat from Portland to Lewiston are as follows, as indicated by the tabulat-ed statement:

In carload lots the boats give the added advantage that they allow a smaller minimum than the railroads. being 20,600 pounds, as against 30,00

follows, with 20,000 pounds minimum

On down freight, the rail rate wheat is now 17 cents per hundred-weight, the boat rate 15 cents, from Lewiston to Portland. The rail rate was 19 cents last year, but was forced goes now by the Open River boats to Portland, thence by the American-Hawalan steamships to Tehuantepec, where it is transferred and reshipped on the Atlantic to destination. From Lewiston to New York and Bos-

One cannot but pause to ask if such a saving, about \$15 a ton, can now be

ROCK CUT IN PAIDDLE OF CANAL

than gain in others through interests in population and production. And the general body of people will be the bet-ter off in the same ratio as traffic is

cheaper and more free.

There is one final consideration which I find to be greatly exercising the minds of far-sighted business men and

This is the readjustment which must follow the short-and-long-haul contro-versy as expounded by the Interstate Commerce Commission in the Spokane and Reno cases. It seems to be con-sidered in Portland that the decision was at least largely a Spokane victory. though with an important reservation. But now by a kind of common consent Portland people are adopting the conclusion that they will be thrown back to rely upon their natural water-route advantages rather than upon any arti-ficial advantages of railway discrimination. In adopting this principle Portland has made the greatest step in her recent history. For no power can rob her of the benefits of the Panama Canal and the open Columbia. Portland is shaking herself mightly in prepara-tion for the new era of the canals.

It will be well for those of the Inland Empire if they, too, can realize the grand significance of this new era. The doctrine of the Interstate Commerce decision and the new era of canals will have a two-fold effect. First, it will make cities in general depend rather upon material than artificial advantages, rather upon the great honest basic movements of commerce than upon sharp jebbery in securing discriminatory rates and the manipulations of secret jobbles. Second, it will create a greater harmony and mutual helpfulness between all parts of our great Northwest. Effect of Canals Era-

Each section has its advantages; each supplements the others. Properly speaking, the seaport city and the inland city are not competitive; they are complementary.

Combination Raies Less.

But it appears from an inspection of the schedules that the combination rates by boat and rail are less in the great majority of places within from 60 to 100 miles of the shipping points than the straight rail rates to or from tidewater.

A.—Portland to points on Deschutes Railway, via Ceillo, per cwt.

Orchard distance from Ceilio, 15 miles—Classes—1 2 3 3 2 27

At Garfield, 88 miles from Lewiston, the combination rate is lower on first and second class, but higher on the food and allow none to go to the stom-The fear entertained by some in Spo

the railroads are more likely to offer stopping to produce and grow and lower rates than on branches. But thereby commit commercial suicide. In however analyzed, rate figures are inhowever analyzed, rate figures are inhowever analyzed, rate figures are infinitely suggestive as to the traffic
possibilities of the near future. The
possibilities of the near future. The
Open River Transportation people are
doing a limitless service to the liand
adjust ourselves to the laws of comdoing a limitless service to the forerunner of
mercial gravitation rather than fight doing a limitless service to the initial adjust varieties to the initial service to the initial service in acting as the forerunner of the time when both the Panama and them. The man or the community that them. The man or the community that them are the initial sufficient of gravity usually sufficient of population in the East and the spirit of intelligent co-operation the spirit of intelligent co-operation and survey beginners all parts of Railroad traffic must adjust itself to the new order, but as already urged, age of commerce, the age of water they lose in one way they will more than gain in others through increase in

dreamed. A Peruvian City That Was.

On the plateau adjoining Lake caca in Peru, the largest lake in South America, are found the ruins of a city as large as Boston. The stone walls of the principal buildings are of excellent workmanship and the gateways are elaborately carved. Some of the sin-gie steres weigh over 150 tons. There the decision is some evidence that the inhabitants were the original discoverers of corn reservation. And potatoes. At all events they were mon consent skillful masons and had attained an organized civilization. The origin of these ruins was as much a mystery 900 years ago, as is shown by the earliest rec-ords of the Incas, as it is now. At present the region in which they are situated is cold and arid and entirely incapable of ripening cereals. It is inhabited by a few hardy mountaineers. It is evident that the climate is en-tirely different from what it was when the plateau was the center of a large population. This change must be due to the elevation of the mountains on the east, and perhaps of the entire plateau.

According to Schedule.

New York Tribune.
William T. Lowis, automobilist, was taiking in Racine about the 25,909-mile automobile trip he had just made "One sees Europe in an automobile."

"One sees haroye in an east to he said. "One really sees it. Some tourists don't, you know.
"Once in Florence I was standing on the bridge over the Arno drinking in the beauty of the old Italian city when

a helf dozen of my compatriots drew near at a quick walk. "They hurried by me, every now and then consulting their watches, and as

they passed I overheard this converse tion: "Well, Florence is all right, sure!"