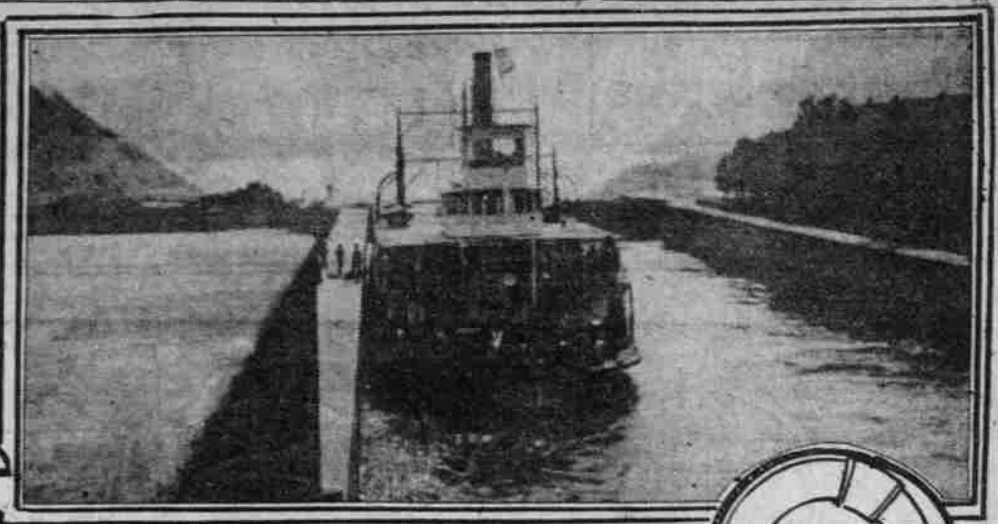
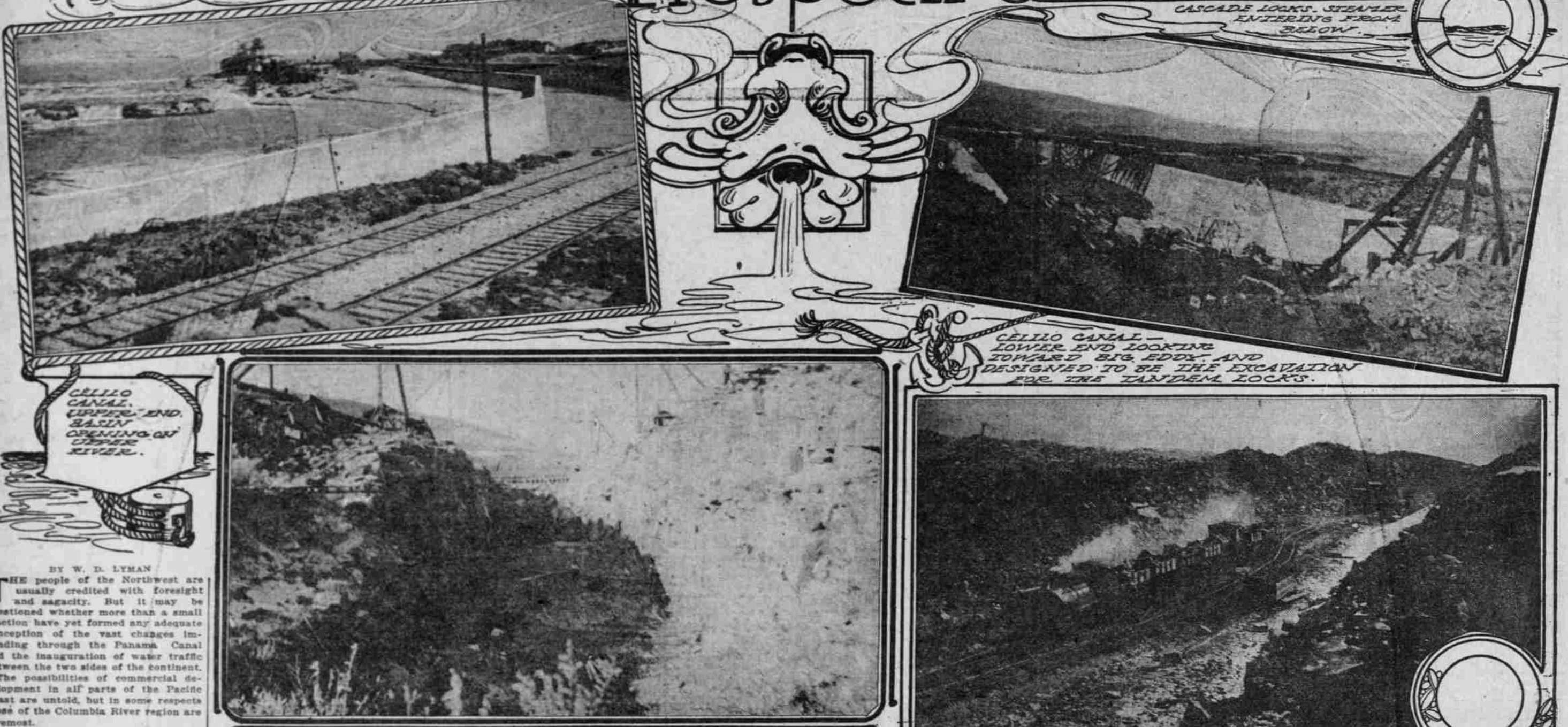


Columbia River Traffic Present and Prospective

Analysis of Vast Changes in Prospect as a 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



CASCADE LOCKS, STEAMER ENTERING FROM BELOW.



CELILLO CANAL—LOWER END LOOKING TOWARD BIG EDDY AND DESIGNATED SITE OF THE EXCAVATION FOR THE TANDERM LOCKS.

CELILLO CANAL—UPPER END BASIN OPENING ON RIVER.

CELILLO CANAL—BIG CUT IN ROCK WALL, OPENING TO BIG EDDY AT LOWER END OF CANAL.

CELILLO CANAL CONSTRUCTION TRAIN AT WORK IN BIG ROCK CUT IN MIDDLE OF CANAL.

BY W. D. LYMAN

THE 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 changes impending through the Panama Canal and the inauguration of water traffic between the two sides of the continent.

The possibilities of commercial development in all parts of the Pacific Coast are untold, but in some respects those of the Columbia River region are foremost.

To one writing from the viewpoint 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 railroads.

The fact is, we, of the Northwest, are on the threshold of a new epoch. Whether we gain or lose individually by this new epoch depends on the degree of intelligence with which we adjust ourselves to it; but there can be no question that there is a new page just turning in the momentous records of Pacific Coast history.

It is not my purpose to discuss, except incidentally, the Panama Canal. 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.

Extension 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 Columbia rivers. That was the age of gold; a dazzling period of adventure, enterprise and rapid fortunes. The steamboat provided the only means of entrance and the proverbial pilot of those days could run on a heavy dew. The captains never thought of law water, but plunged right into the teeth of rapids and reefs, daring all. And it was worth the daring.

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Plans at Celilo.

By reason of the heavy railroad tariff under which the Inland Empire has rested, the construction of the Celilo Canal and other improvements on the river, such as would insure a 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 upon Congress. Various propositions have been broached by engineers. At one time a ship railway was favorably considered. Then the plan of a canal, one around the Celilo Falls and one around the Grand Dalles, thus utilizing about five miles of good river between the two sections.

Work of Open River Boats.

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.

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 second-foot at low water to 1,000,000 or more at high water, is compressed into a channel at Five Mile Rapids of but 145 feet wide at low water. It has never been satisfactorily sounded, but it is believed to be deeper than it is. 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 300,000 gallons of concrete in this part of the work. The finest kind of steam shovels are in use. At one point I saw a Vulcan with an arm 40 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.

Effect of Canals Era.

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 navigation than artificial advantages, rather upon the great manufacturing cities? What will that signify to general prosperity?

Combination Rates Leaks.

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 50 to 100 miles of the shipping points than the straight rail rates to or from tidewater.

A Peruvian City That Was.

Hartford Times.

On the plateau adjoining Lake Titicaca 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 single statues weigh over 150 tons. There is some evidence that the inhabitants were the original discoverers of corn and potatoes. At all events they were skillful masons and had attained an orderly civilization. The origin of these ruins was as much a mystery 300 years ago, as is shown by the earliest records 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 entirely 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.

Inspection of the work shows that it is in excellent progress. Two large contracts for canal construction were made, one of 2500 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 the past year than in any three years before. Seven hundred men have been employed, and the number may be increased, if funds justify.

An Immense Waterway.

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.

But there is another series of conditions equally important, and that is the present navigation of the river, and its significance as leading up to future traffic when both Columbia River and Panama are open to continuous navigation.

Comparison of Rates.

Per ton	By Boat	By Rail
Portland to Lewiston	\$2.50	\$3.50
Lewiston to Portland	\$2.50	\$3.50
Portland to The Dalles	\$4.50	\$5.50
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