

Dream of Open River to Be Realized

RECOGNITION OF CELILO CANAL PROJECT BY THE GOVERNMENT
GUARANTEES REMOVAL OF OBSTRUCTIONS TO RIVER NAVIGATION



5 MILE RAPIDS
LOOKING UP STREAM
SHOWING FISH TRAPS
AT
MESS HOUSE CURVE

Falls. Within this distance there is a fall of 80 feet at low water, a sheer fall of 30 feet occurring at Celilo Falls. The principal obstructions are Three-Mile Rapids, Five-Mile Rapids (for the Dalles of the Columbia), Ten-Mile Rapids, and Celilo Falls, the whole forming an almost continuous gorge of rocks and powerful currents and eddies. In the consideration of the various projects for improving this part of the river the most serious difficulty was encountered at Five-Mile Rapids, or the "Dalles," this word being said to mean "trough" or "mill-race." For a distance of 500 feet at this point the water rushes through high walls of solid rock, not over 100 feet apart. The bottom is a succession of pockets 40 to 60 feet deep, and on account of the choked condition of the channel and the quantity of water forced through it, the velocities are high and form dangerous cross-currents and eddies. It has been aptly said that this part of the river is "turned up on edge."

The problem of overcoming these obstacles presented many complicated features, which made its solution difficult. After many surveys and investigations the project adopted as being most feasible provides for the construction of a continuous lateral canal along the Oregon

shore from Big Eddy, just below Five-Mile Rapids, to a point just above Celilo Falls, and the improvement of Three-Mile Rapids, at the lower entrance to the canal, by the removal of rocks to straighten and widen the channel. It is estimated that in order to make this channel navigable in the rapids it will be necessary to remove 57,000 cubic yards of rock. The canal proper will be about 8 1/2 miles in length, 8 feet wide at the bottom, 8 feet deep, and will have basins in which boats may pass each other at intervals of about a mile. It will have four locks, two of which will be combined in a tandem lock. These locks will be 40 feet wide and capable of passing boats 250 feet long. They will be located one at the upper entrance, just above Celilo Falls, the second just below the head of Five-Mile Rapids, and the tandem lock at the lower entrance to the canal. In the construction of the canal it will be necessary to cut through five miles of solid rock; it will take five years for completion and will cost approximately \$4,000,000.

The route for the canal as proposed by Major W. C. Langitt, "commences in the rock on the Oregon shore at a point just below Big Eddy, and runs along the rocky ground between the railroad and the

river. At the head of Five-Mile Rapids it passes into sand and gravel for a distance of about 12,000 feet, where rock is again encountered, and through which it continues for about 700 feet, until it enters the second stretch of sand and gravel at the "Willows." At the head of Ten-Mile Rapids, about 600 feet above the "Willows," the line strikes the basalt again, and keeps on between the O. R. & N. Co.'s track and the river until finally the low place just below Celilo Falls is reached. Here it is proposed to wall off the canal from the river by a high masonry wall founded on rock, and this special wall will form a large basin in the canal. From this basin the canal passes into the upper lock, and finally enters the river in the rock and gravel just above Celilo Falls. The total length of this line will be about 6,000 feet. It will not destroy any of the existing fish wheels or seining grounds, but means of access to them are provided over the canal. Neither will the proposed canal necessitate any diversion of the O. R. & N. Co.'s tracks, but a retaining wall will probably be required along the railroad embankment for about 1000 feet, where the canal hugs it near the head of Five-Mile Rapids.

The completion of the Celilo Canal will mark the beginning of a new era in the commerce of the Northwest. It will open the Columbia River to unimpeded navigation from the sea to Priest Rapids, Wash., and to Lewiston, Idaho, on the

the navigable portion of these rivers must be 1200 or 1500 miles in length. This navigation, however, is interrupted by obstacles at different points, some not of a serious nature, while others, like that of the Celilo Falls, can only be overcome by the work of improvement and construction.

"With the canal at Celilo in operation waterway communication by the Snake River to the sea would be open nearly the entire year, and certainly at the times when it is greatly needed to a considerable distance above Astoria, which is several miles beyond Lewiston on the Snake River. This would, therefore, open up an immense territory. On the other hand, by way of the Columbia River direct, there would be navigation open a considerable distance into the Big Bend country, which is an empire in itself.

"As a transportation proposition the canal at Celilo Falls would absolutely revolutionize the traffic question and transportation rates of all the portion of country drained by the Columbia and Snake Rivers, and this is recognized by every railroad man who understands the situation. Indeed, I know that one of the leading traffic managers of the Harriman lines has said that the portage railway will affect rates clear to Lewiston. "The result of building the canal will in my judgment compel the movement of the great volume of traffic down the water level haul, either by boat or by rail. Furthermore, it will induce the building of many short roads into the interior in order that the communities tributary to such roads may get the benefit of the river rates. In fact, I should not be surprised to see electric roads as far north as Spokane on the Snake River.

"Many of these benefits will come prob-



HEAD OF 5 MILE
RAPIDS LOOKING UP STREAM

RECENT events have served to place the stamp of reality upon the Northwest's long dream of an open river to the sea. More than two decades ago the importance to commerce of overcoming the obstructions to navigation which exist in the Columbia River above The Dalles was recognized, and the impetus given to the movement which has lately resulted in the Government's guaranty that the Celilo Canal and an open waterway would soon be an accomplished fact.

This guaranty, however, in the shape of a recognition of the importance of the canal by an appropriation sufficient to insure the beginning of its construction at this time, was only secured by the united and insistent efforts of the people of the Northwest. The Government first considered the opening of the Upper Columbia in 1874, and from time to time since has approved various projects and appropriated sums of money for the purpose of making the Columbia a navigable stream above The Dalles. These projects as they developed were discarded as infeasible and impracticable, until a modification of the 1890, or what is commonly known as the Hart's project,

was adopted in 1903. It is under this modified project that the canal will be built, but this was only made possible by the presentation of the right of way to the Government by the State of Oregon, the state appropriating \$100,000 for that purpose.

While these various projects were under consideration, however, commercial demands for an open river were so great that it became essential that some measure of relief be provided until such time as the Government had the Celilo Canal in operation. To satisfy these demands the State of Oregon undertook to furnish a temporary relief by the construction of a portage road, and the Legislature of 1903 appropriated \$150,000 for this purpose.

This portage road is now practically completed, and according to present plans should be open to commerce by June 1. Its opening will be a memorable event in the Pacific Northwest's commercial history, and from that day on the upper regions of the Coast will be able to realize the full worth of water transportation to the sea.

The barrier to unobstructed navigation on the Upper Columbia River consists of the 12-mile stretch from the foot of The Dalles Rapids to the head of Celilo



GENERAL
VIEW OF
CELILLO FALLS

Snake River, a distance inland of over 500 miles. This will give the great wheat-growing sections of the Palouse and Walla Walla, Wash. and the Camas and Cold Spring, Idaho, the benefit of water transportation to the sea.

The area of productive country that will receive direct benefit from an open river may be divided into the following districts:

Lewiston district, embracing over 2,000,000 acres, including Walla Walla County, Oregon; Asotin County, Washington; Nez Perce, Latah and Idaho Counties, and a part of Shoshone County, Idaho.

Palouse district, including Whitman County, Washington.

Big Bend district, including Spokane, Lincoln, Douglas, Adams and Franklin Counties, Washington.

Walla Walla district, including Walla Walla, Garfield and Columbia Counties, Washington.

Takima Valley, including Yakima and Kittitas Counties, Washington.

Pendleton district, including Umatilla and Morrow Counties, Oregon.

The Dalles district, including Sherman, Wasco and Gilliam Counties, Oregon, and Klickitat County, Washington.

Timber regions, too, whose wealth is at present unavailable, will be opened up as a direct result of the canal, and this is true also of mining regions, notably some parts of the Seven Devils District and the Coeur d'Alene district of Shoshone County, Idaho.

An important feature of the benefits to be derived from an open river is the developing effect it will have on the regions reached. Lower transportation rates and better facilities are not only a benefit to present producers, but stimulate the development of the country and invite increased production.

Of the advantages that will result to commerce from the canal, J. N. Teal, strongly identified with the fight for an open river, says:

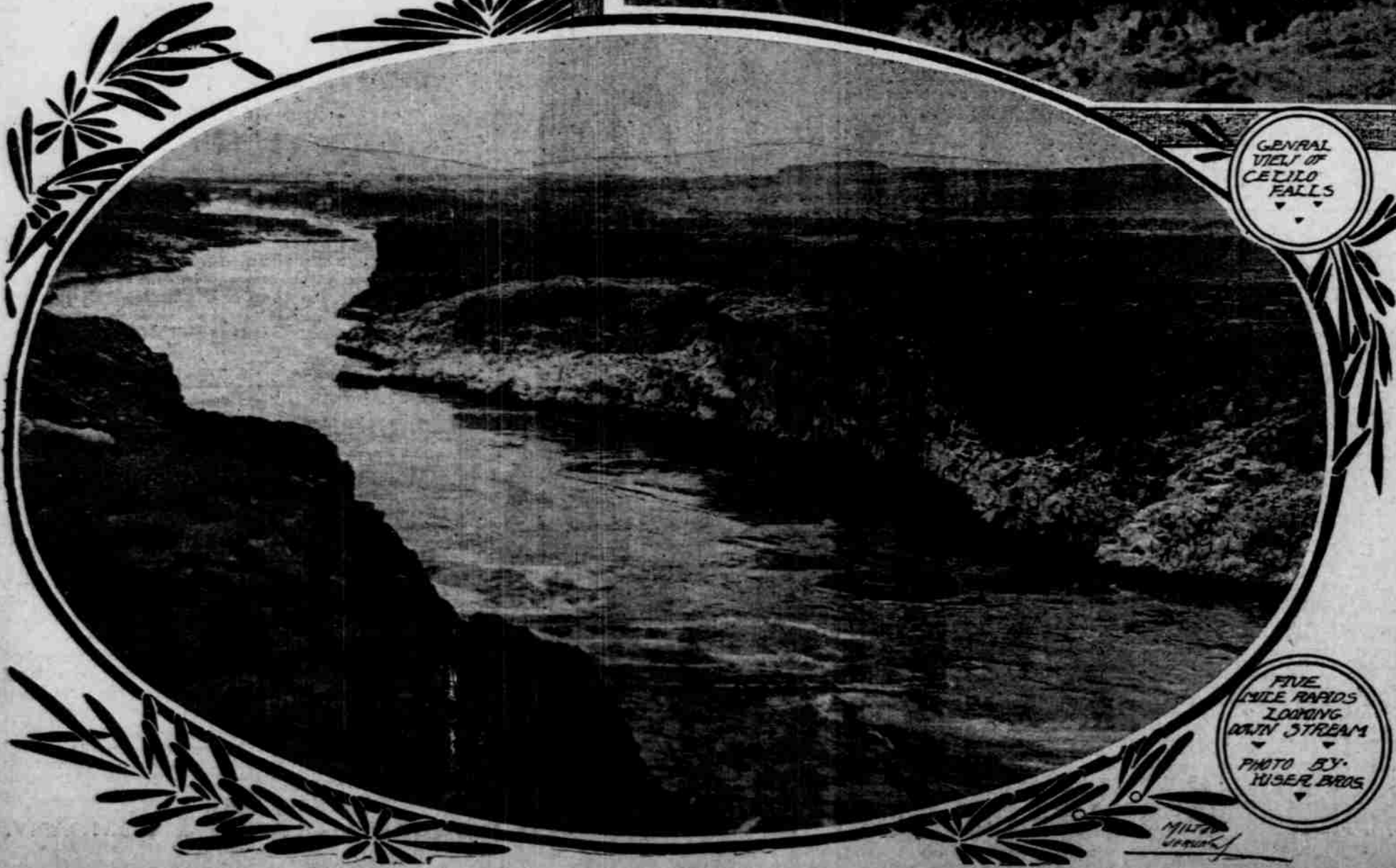
"The Columbia River and its tributaries, such as the Snake River and the Clearwater, drain a section of country containing thousands of square miles. I should say offhand that

ably in a lesser degree by reason of the building of the portage railway, but it cannot be expected that it will furnish the full benefit of the canal, where steamers and barges can go through without breaking bulk.

"To appreciate what an open river means, one has but to look around him. On the Willamette River, since the locks were opened, more than 30 years ago, the river has absolutely controlled the rates as far as the head of navigation, and this is true of the Columbia River below Portland and up to The Dalles. A comparison of freight rates to The Dalles and to points beyond show unanswerably what river competition means. For instance, on nearly every heavy article the rate by railroad to The Dalles is \$2, whereas to Arlington, about 65 miles beyond, the rate is \$8. Throughout the United States we find examples of the expansion of river traffic in the face of railroad competition, and I think it can be stated as a truism that there is no navigable river on earth that is not largely used for traffic even though railroads parallel it on both sides.

"The right of way over a river is free; there is no bonded indebtedness and no great capitalization is required. Two or three men can build a boat and operate it, and all the railroads on earth cannot control the river. For instance, a steamboat with barges could start from Lewiston and go clear to the sea with the current helping them every inch of the way. It is just such conditions that cheapen transportation charges, and as the cost of delivery lessens, production increases and larger markets are found.

"The benefits from an open river will not be confined to the river counties, but will extend far back into the interior. "In my opinion the state in undertaking the building of the portage railway has taken a step which will not only prove to be of incalculable benefit, but which will reduce freight rates and encourage the development of the country. It will furnish an object lesson as to what the people can do when they are united, and will always have a tendency to advance the building of the canal."



FIVE
MILE RAPIDS
LOOKING
DOWN STREAM

PHOTO BY
HUSER BROS.