

# LINK RIVER DAM COMPLETED AT A COST OF \$250,000

## Success Finally Crowns Efforts to Surmount Engineering and Other Obstacles

Cranes groaning, hoists creaking, trucks crawling along a narrow grade to deliver great loads of sand, steel, cement, rock and lumber, the rending roar of dynamite at the end of the working shifts, a medley of men wrestling with a rock-ribbed river—all this stretching out over weeks and months, and then of a sudden, out of the indescribable confusion, emerges a finished masterpiece of engineering.

And that's the description of the building of the Link River dam, which—speaking of the dam proper—was completed October 30. Clean-up crews are now at work removing the debris of construction. A week or ten days' work remains on deepening the channel approach on the west side, and the removal of the upper reef, a natural barrier higher up, which prevents lowering of the Upper Lake to the point allowed in the United States government contract. 4137 feet above sea level, will not be completed until December 15.

The dam itself is done, and makes a natural storage reservoir of the Upper Lake, supplying water to the Klamath irrigation project and holding back the spring run-off so that in the dry summer months there will be water for irrigation and to turn the wheels which grind out power in the California Oregon Power company's plant at Copco.

Work on the dam was started in August, 1920, but made little progress during the month it was under way. In May of this year it was resumed and pushed steadily to completion.

It is no small task to throw a barrier across a river of the volume and velocity of the Link River current, but John Boyle, assistant engineer of the California Oregon Power company, and his corps of engineers and construction superintendents were equal to the task.

Starting on the west side they ran a temporary wing dam toward the center of the stream, shunting the flow to the east bank. Excavations were made for a heavy abutment on the bank, and the rock was excavated to secure a solid foundation.

The dam was slowly thrown half-way across the stream, then the temporary dam was removed and a similar one placed on the east side. The river swung back to the western shore, and the dam proceeded across, to end in a solid abutment buried in the east bank.

It's a simple thing in the telling, but men toiled and sweated and schemed to overcome the river—damming it while they dammed it—and finally conquered it. It wasn't child's play in the earlier stages, and one life was lost when a boat upset in the rapids.

Two hundred and twenty-five men were employed at the peak of construction. The crew is now reduced to 75, who are employed on the western channel and on the upper reef.

The dam structure is 435 feet between abutments. The abutment on the east shore is 60 feet long and the western abutment is 40 feet, making a total of 535 feet. The average height, from bedrock to the top of the dam is 15 feet. The elevation of the top above sea level is 4145 feet.

John Boyle has the yardage figures at the tips of his fingers and the end of his tongue. Twelve thousand sacks of cement, 1200 cubic yards of Hoey sand and 1600 yards of W. D. Miller's crushed rock went into the construction, finally resolving into 3000 yards of concrete, which was reinforced with 80,000 pounds of steel.

The dam looks good to engineers. H. D. Newell, manager of the local reclamation project, and W. F. Copen, project engineer, were always on the job. They are satisfied that the government got a fair deal in its contract with the power company for building the dam. And the dam looks good to a layman. The slightest talent for observation and comparison shows that, apart from the technical side of it, it's a well finished job. There are no plastered-over flaws. It stands just as it was poured in the forms, and would compare in fineness of finish with the exterior of a metropolitan building.

In fact, Mr. Boyle says that the class of concrete that went into it is the same that goes into the Class buildings in San Francisco, and a higher grade than is ordinarily used on dam construction.

Shovels and dredges scooped from

excavations 20,000 yards of bedrock, including 8,000 feet taken out of the river bed in deepening the upper reef.

The dam is a series of apertures in an immense concrete block. During the summer season these openings are closed, 19 by steel gates and 25 by flashboards, holding the water at as high a level as natural conditions permit, but never exceeding 4143.3 above sea level. In flood season the gates can be raised and flashboards removed unit by unit, to keep the level at 4143.3, or at any time to lower it to the minimum level of the contract with the government, 4137. A track runs across the top of the dam, which is 12 feet wide on top and protected by railings on both sides, to carry the traveling crane for removing and replacing the flashboards and operating the gears which raise and lower the gates.

The bottom of the spill way, when the flashboards are removed, is 4130 feet above sea level. The bottom of the gates are 4130 feet above sea level. Each gate is five feet wide.

There are six openings into the Keno canal, thus allowing at the maximum height of the lake and when they are opened to the utmost, a volume of water 30 feet wide and seven feet deep to flow into the Keno canal.

No small item in the construction of the dam was the 250,000 feet of Klamath pipe that went into the making of concrete forms, cribs, derricks, stagings, tramways, camp buildings and other work. The money for this material and the summer payroll of the camp were two considerable factors in lessening business depression here this summer.

Most of the lumber used in temporary construction will be waste, but Mr. Boyle said there was a possible salvage of 50,000 feet in the lot.

"Give the credit to the California Oregon Power company workers," said Mr. Boyle, but a little probing in other quarters produced a few names whose owners were in charge of one branch or another of construction. Mr. Boyle, assistant to P. O. Crawford, the company's engineer, supervised the engineering work, with D. D. Gammon as chief aide on the job. J. F. Partridge was the general superintendent of construction, and Duaneason and Harrelson, of San Francisco, superintended the concrete work.

One item, missed in the telling, will mean more to many people in measuring the size of the job than engineer's figures. The total cost was \$250,000.

### New Traffic Cop Gets Mayor as Victim

The traffic officer of Pendleton, Oregon, is pushing Officer McDonald of this city pretty hard for first honors in the enforcement of traffic regulations. R. Turner of Pendleton, who was recently appointed traffic officer of that city by the chief of police and whose appointment was ratified by Mayor Hartman, had the latter as his first victim. The police judge fined the mayor \$5. The latter paid up with a smile like a "dead game sport," and complimented the officer who had arrested him.

### ELECTION NOV. 8

The Common Council has called a special election in the city of Klamath Falls, for Tuesday, November 8, 1921, to be held between the hours of 9 o'clock A. M. and 8 o'clock P. M., and has designated polling places in each of the five wards of the city as follows:

First Ward, Brown's carpenter shop, corner Main and Center streets.

Second Ward, City Hall.

Third Ward, Buesing's Real Estate office, between 10th and 11th streets.

Fourth Ward, Mills Addition Hall.

Fifth Ward, Charley DeLap's house corner Upham and Sargent.

Owing to the fact that the registration of voters in the city is now by county precincts—10 in number, instead of by City Wards, 5, in number, as formerly it is necessary that electors be advised as to where they may vote Tuesday, November 8.

Electors registered in precinct 1 (one) will vote at Browns carpenter shop.

Electors registered in precincts 2, 3, 4 including that part of the city between Center and 7th streets will vote at the City Hall.

Electors registered in precincts 5 and 6 embracing that part of the city bounded by 7th street on the southwest, and by Upham street on the north, and by the Government canal between Prospect and Washington street and Eleventh street on the northeast, will vote at the Real Estate office of Fred Buesing on southerly side of Main street between 10th and 11th streets.

Electors registered in precincts 8 and 10 embracing that part of the city north of the Government canal between Prospect street and the Railroad, and west of the Railroad, and that part of the city known as Shippington will vote at the Charley DeLap house corner of Upham and Sargent streets.

Electors registered in precincts 7 and 9, embracing Mills Addition, Railroad Addition, and Hot Springs Addition will vote at Mills Addition Hall.

A. L. LEAVITT, Police Judge.

November 7, 1921.

The Common Council having completed its estimate of the amount of money proposed to be raised by taxation for all purposes in the City of Klamath Falls, Oregon, for the fiscal year of the city beginning January 1st, 1922, now submits the same for approval or amendment.

The first publication hereof is to be made in the Evening Herald on Monday, the 7th day of November, and the next publication thereof to be made on the 18th day of November, 1921.

The tentative budget herewith submitted is itemized as follows:

GENERAL FUND	
	Amount
Mayor	\$2100.00
Police Judge	2100.00
City Attorney	1200.00
City Treasurer	750.00
Health Officer	750.00
Chief Police	1800.00
Patrolmen (four)	8720.00
Special Police	350.00
Councilmen	1440.00
Assistant in office Police	400.00
Judge	300.00
Elections	300.00
Stenographer for City	300.00
Attorney	500.00
Auditing books	500.00
Police Dept.	
Meals for city prisoners	100.00
Supplies for Police Dept.	50.00
Jitney hire for Police	40.00
Post House	
Drugs	50.00
Nursing	300.00
Groceries	50.00
Supplies	25.00
Quarantine	
Guards and Officers	150.00

If you make up your mind to wait until you are wealthy before starting to do charitable deeds, you will never do any.

TRADED IN several Victor, New Edison, and Sonoras. Right prices and right terms. Better see them at once. KARL SHEPHERD CO. 507 MAIN ST.

Auto Hire	50.00
Supplies	30.00
Health Officer	
Mileage	100.00
Expense	100.00
City Hall	
General Supplies	200.00
Office Supplies	500.00
Telegrams	25.00
Publications and Advertising	150.00
Plumbing supplies	200.00
Garbage hauling	20.00
Drayage	20.00
Laundry	15.00
Heat	900.00
Hay, City Pound	100.00
Miscellaneous	
Premium on bonds	150.00
Court fees	250.00
Fire Fund	
Rent and recharging battery	50.00
Supplies and repairs	650.00
Gasoline and oil	250.00
Laundry	60.00
Hose	1000.00
Salary of Fire Chief	2100.00
Asst. Fire Chief	1800.00
Hosemen	3420.00
Drivers, 1 at \$135.00	
1 at \$25.00	1920.00
Volunteer firemen	300.00
Street Fund	
Labor	3000.00
Lumber	1000.00
Supplies	200.00
Blacksmithing	75.00
Grain and hay	400.00
Labor with team	1000.00
Gasoline and oil	175.00
Drayage	10.00
Repairs to flusher	50.00
Repairs to pavement and other repairs to street	1500.00
Pay City Engineer	200.00
Filing saw	10.00
Salary Street Superintendent	1800.00
Salary Teamster	1800.00
First Street Improvement	3000.00
Incidental Expenses	
Light, Water and Power Fund	7400.00
Library Fund	1200.00
Municipal Interest Fund	
Municipal Interest fund	35,000.00
Grand Total	\$92,755.00

Notice is hereby given that Monday, November 28, 1921, at 9 P. M., at the Council Chamber in the City Hall is hereby appointed by the budget committee as the time and place where the foregoing estimates of expenditures for the fiscal year, beginning January 1, 1922, may be discussed with the Common Council as the levying board by any person who shall be subject to the tax levy necessary to produce the amount of the foregoing estimates, may be heard in favor of or against said tax levy or any part thereof.

A. L. LEAVITT, Police Judge.

November 7-18.

## Fords Given Away For a Few Dollars

1914 Touring	\$125.00
1916 Roadster	\$150.00
1917 Touring	\$175.00
1917 Touring	\$200.00
1920 Touring, starter	\$300.00
1921 Touring, starter	\$400.00
1918 Chevrolet	\$300.00

TERMS ON ALL.

WE RENT FORDSON TRACTORS.

### E. R. DANNER MOTOR CO.

Don't fail to read the Herald Classified Ads.



Let the departed ones be honored even in the grave. Let the sculptured marble direct our steps to the scene of their long sleep; Let the chiseled epitaph repeat their names and tell whose repose the nobly good and wise.

—Longfellow.

### Klamath Falls Marble and Granite Works

1040 Main St. Klamath Falls

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# Thor

## ELECTRIC WASHING MACHINE

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## Luminoid Cylinder

WE offer at a rock bottom price, the very latest improved machine, years ahead of competition. This is the only metal cylinder made which does not require cleaning after use. Grease and scum cannot stick to this wonderful Luminoid metal. The most delicate garments are safe against wear and tear in this cylinder. The holes are counter sunk and have the edges smoothly rounded. No cylinder like it has ever been made before.

The Fastest, Most Improved Washing Machine Ever Built

One reason for buying a washing machine is to save time. This Thor saves up to an hour more than any other. It is also built to outlast other machines. Made entirely of metal, it should last a lifetime.

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For the arrest and conviction of any person stealing, tampering with or adulterating

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