

# Millions Spent for Power Oregon Has Biggest System

opment in Oregon during the year just in length and will cost approximately closing, from the construction stand-point, are the initial work by the very heavy, is similar to that of the Portland Railway, Light & Power company on a \$10.000,000 plant on the headwaters of the Clackamas, the erection by the Pacific Power & Light company of an 8000 horsepower plant on the lower reaches of Hoods river house site on Oak Grove creek, a and the completion of a high power transmission system from Prospect, on the headwaters of Rogue river, to Springfield, at the head of the Wil-The completion of this system makes

nterconnection between companies serving the Willamette valley on the north and companies serving California and Western Arizona and Ne-

LARGEST IN WORLD This creates the largest simultaneworld. The line from Springfield to Prospect was built and is operated by the California-Oregon Power com-pany. It was constructed for the pur-

pose of selling electrical energy to the Mountain States Power company of selling electrical energy to serving territory between Eugene and Plans are already under way to the system in the neighbor-

hood of Eugene and Independence to the system of the Portland Railway, Light & Power company and aid all the electrical industry from Portland as far east as The Dalles, Hood River and Wasco in Sherman county to the great Pacific coast trunk transmission

The new plant being erected by the Pacific Power & Light company on Hood river will cost, according to the estimate, \$1,250,000 and will have a capacity of 8000 horsepower. It will e modern and up to date in every ect. Water is diverted from Hood river at the mouth of Neal creek two and one half miles south of the city, and carried down the Hood river canyon through a large wood stave and steel pipe line to the power house which is located adjacent to the city limits and within sight of the Columbia river highway bridge.

This plan is to be used by the Pacific Power & Light company to supesale power to Portland and also for the purpose of taking care of the rapidly growing business of the Pacific Power & Light company in The Dalles-Hood River district. DEVELOPING HOLDINGS

To enable it to take care of its eger increasing peak load and keep pace with the demand for power from the new industries of Portland, the Portland Railway, Light & Power company has actively begun to develop company has actively begun to develop its Clackamas river holdings, a work which has been in contemplation for several years. The power generated at this plant will be added to the existing system of the company at the Cazadere plant. The plant will ultimately consist of three units with a combined production of 100,000 horse-power. It will displace to a large extant the present steam generation of the company.

The cost of the first development is estimated at \$4,700,000. The ultimate expenditure will be approximate-

is estimated at \$4,700,000. The ulti-mate expenditure will be approximate-ly \$10,000,000 and the entire project will not be completed until July, 1924. An unusual feature is that the first stage of development is the construc-tion of a highway on which to truck in supplies and material for the plant. This highway, which will be on stand-

Agents for **FLUHAER** SHINGLES

Lensch Bros. Flour, Feed, Hay, Groceries and

Produce

241 Front Street COR. MAIN, PORTLAND, ORE.

PRONE MAIN 2500

Major projects' in electrical devel-1 and lines and grades, will be 28 miles Columbia river highway.

Starting up the Clackamas river from the present terminus of the railroad at Straight's flat the road will be built 20 miles to the power branch of the Clackamas. From this point an additional eight miles will take the road to the diversion dam. The road will run through heavy timber. A right of way 400 feet will be cleared for the road and transmission line.

To clear the right of way will involve the cutting of 20,000,000 lumber feet of timber,

of the water will be 865 feet, the high-

storage reservoirs. One of these will be on the headwaters of Oak Grove creek at Timothy meadows, near Clackamas lake, at an elevation of

WATER SUPPLY GOOD The other reservoir will be on the upper middle fork of the Clackamas at an elevation of 2000 feet. These

The area of the two reservoirs will be approximately five square miles. At the power plant will be installed vertical turbine type which will drive a vertical generator of 30,000 kilowatts. The energy to be transmitted from the plant will be at first 60,000 volt potential to be later increased to 115,000

The steel for the pipe will be fabricated in Portland. power act will undoubtedly serve as a stimulus for future power develop-

The diversion dam will be 45 feet From the dam the water will be car-ried for over six miles through a nine-

est fall in the United States.

Another step in the work is the digging of a tunnel three miles long from a point above the diversion dam through a mountain to tap another branch of the Clackamas. This tunnel will be 10 feet in diameter.

A third step is the building of two

two impounding reservoirs will provide a constant supply of water and make operations independent of the low water stage in the fall of the year.

35,000 horsepower waterwheel of the

ment in Oregon," said Lewis A. Mc-

Arthur, general manager of the Pacific Power & Light company.

"Already a number of applications have been filed on important streams, particularly on the Deschutes river. The Pacific Power & Light company has been given a preliminary permit for the development of a 40,000 horsepower plant at the reclamation site,

K. E. Karlson

& Company

L. A. Crawfort, Proprietor

Designers and Makers of

**APPLIANCES** ORTHPEDICAL

SURGICAL

INSTRUMENTS

NEW DESIGNS, SHARP-ENING, REPAIRING AND REPLATING

Experience Gained in Leading European Factories

Work Guaranteed Equal to Foreign or American Make

Established 1905

100 Thirteenth St.

PORTLAND, OREGON

BROADWAY 3613

20 miles south of the mouth of the Deschutes river. Guy W. Talbot, pres-ident of the company, has announced that this plant is scheduled for early construction, and that at the same time the platn is being constructed a high transmission line will be built Washington Water Power company. from The Dalles by the plant to Uma-

Pendleton. only tie together the two systems of cific coast trunk system. It is exthe Pacific Power & Light company, pected that the line from Kennewick but will also bring into connection to Pendleton will be built this winter, with the main Pacific coast transmission system the very large additional cost more than \$5,000,000."
mileage of transmission lines, including all the lines of the Pacific Power company has announced its intention

Draymen

Broadway 3470

Walla territory, the lines of the Chi- Deschutes river or Tumalo creek,

Drayage Service

-that can be relied upon eliminates

one of the annoying problems of business

Clay S. Morse

WE CAN move anything. No task is too large or too small for our careful and thorough execution.

Hauling heavy loads and erecting machinery are two of our specialties. We also move, pack and store household goods. We handle carload shipments on our own sidetrack. Our storage warehouse has modern equipment and sprinkling protection, so that goods stored there take a low insurance rate. We offer you a complete service, which means that we look after all the details of moving, packing or storing anything.

Warehousemen

Hoisting, Moving and Heavy Hauling

Pool Cars a Specialty

cago, Milwaukee & St. Paul railway "This important trunk line will not hundred miles of new lines to the Pa-

covering a large part of Northeastern tilla, where it will connect with the Washington. The connection con-line extending from Kennewick to templated by the Pacific Power & Light company will add a great many cost more than \$5,000,000."

The Bend Water, Light & Power & Light company in the Yakima-Walla of developing new power either on the

Forwarders

Portland, Oregon

#### **Iron and Steel Products**

market for Steel, it will pay you to write or call us up.



We carry in our ware-house a first class stock of Mild Steel Bars, Plates, Angles, Chainels, Sheets, Shafting, Light Rails,

Private Trackage Lincoln, Hood and Grant Sts.

H. B. Davis Iron & Steel Co.

PORTLAND, OREGON

John Welch Dental Depot

Complete Line of Dental Supplies

Patients' Requirements

Second Floor, Broadway and Oak Opposite Benson Hotel

PURE PASTE PRODUCTS

BENTON STATION PORTLAND, OREGON

# Curtis Brothers, Inc.

Successors to A. D. Moodie House Moving Co.



## House Movers

A full set of the latest improved machinery for raising and moving buildings, boats and other heavy work.

Brick Buildings a Specialty

Residence Phone Yard 595 Gideon Street Sellwood 1165-Phone-Sellwood 2766

#### Wilson's Auction House

Dealers in Used and New Furniture of the Better Kind

169-171 Second St.

Near Morrison



PHONE MAIN 1626 PORTLAND, OR.

## White Wizard Washing Compound

Washes your clothes without rubbing and will not harm the most delicate fabrics, as it contains no lye or injurious chemicals. Cleans woodwork in a manner that is positively astonishing.

Manufactured by

388 East Washington St. Phone East 7120. Portland, Oregon For Sale at Groceries and Department Stores AGENTS WANTED OUTSIDE OF PORTLAND Free Samples on Request

### Columbia Wire and Iron Works

- All Kinds of Wire and Iron Work.

E. 8th and Market Sts. Phone East 0702-Portland, Ore.

Portland Newspaper Union

47 Fourth St. Portland, Oregon

# Porter-Scarpelli Macaroni Co.