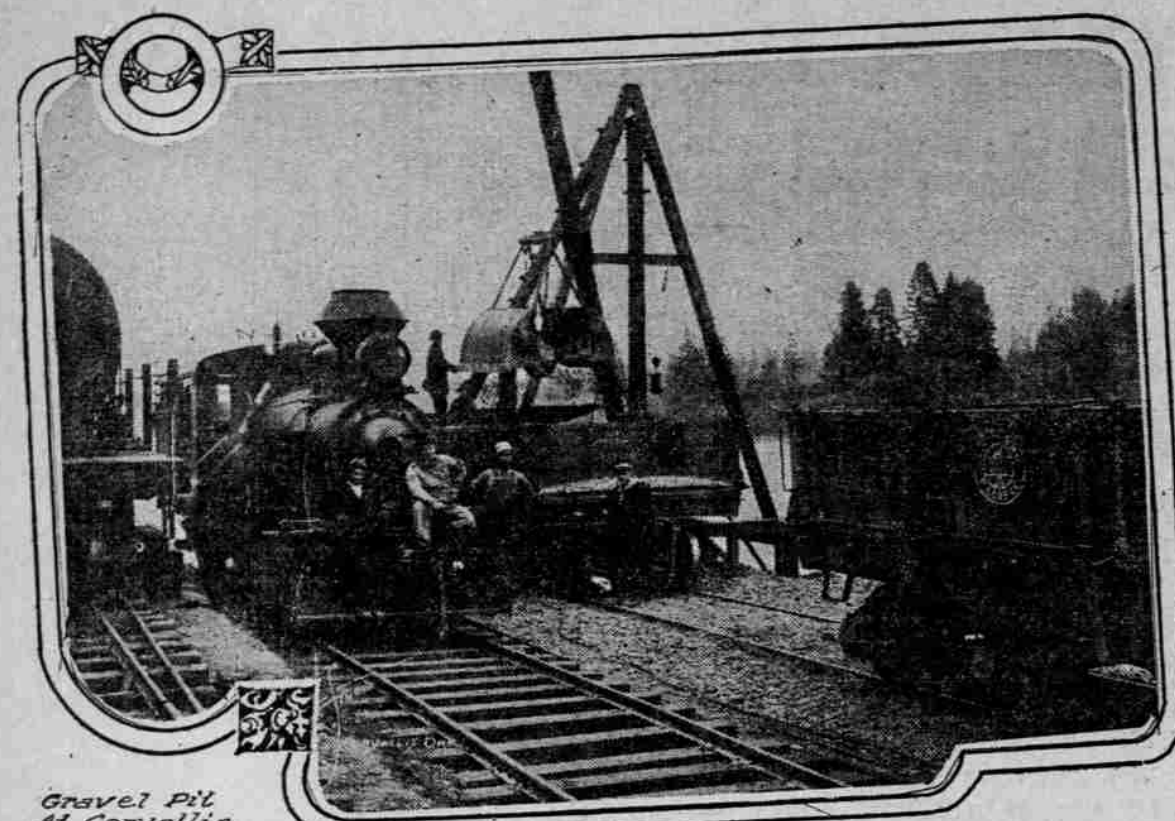


NEW ELECTRIC RAILROAD SYSTEM BOON TO OREGON

PORTLAND, EUGENE & EASTERN WILL OPERATE OVER 340 MILES OF TRACK IN RICH WILLAMETTE VALLEY.



Gravel Pit At Corvallis.

By Robert E. Strahorn, President Portland, Eugene & Eastern Railroad.

WHEN the present approved plans of the Portland, Eugene & Eastern Railway Company shall have been carried into effect, the Willamette Valley of Oregon will have complete and adequate rapid-transit connections with Portland, the chief city of the state, and all of the important cities and rich farming communities of the valley will have been intersected by cross-valley lines. It will be literally possible to reach almost any portion of the valley by electrical conveyances of the most approved and most modern construction. Moreover, Portland will rank fifth among the cities of the United States in possession of miles of interurban electric railroads.

The Southern Pacific, which stands sponsor for this great project, may truthfully be said to be the pioneer to take up electric railway development in a modern, comprehensive and really extensive way. Beginning at Los Angeles in the early history of interurban electric railway projects, it has created, under the title of the Pacific Electric Company, the largest electric railway system in the world, now reaching a mileage of over 1000 miles. This has been followed by very extensive similar development in Central California and by its allied interests in Salt Lake Valley, Yakima Valley and elsewhere. It began active consideration of the interurban electric construction in the Willamette Valley several years ago, and in 1909 foreshadowed the electrifying policy now being vigorously pushed in all parts of the valley by beginning the rebuilding and preparations for the electrification of the first unit of 100 miles. This is locally known as the West Side loop, which serves such important centers as Hillsboro, Forest Grove, McMinnville, Newberg and Oswego.

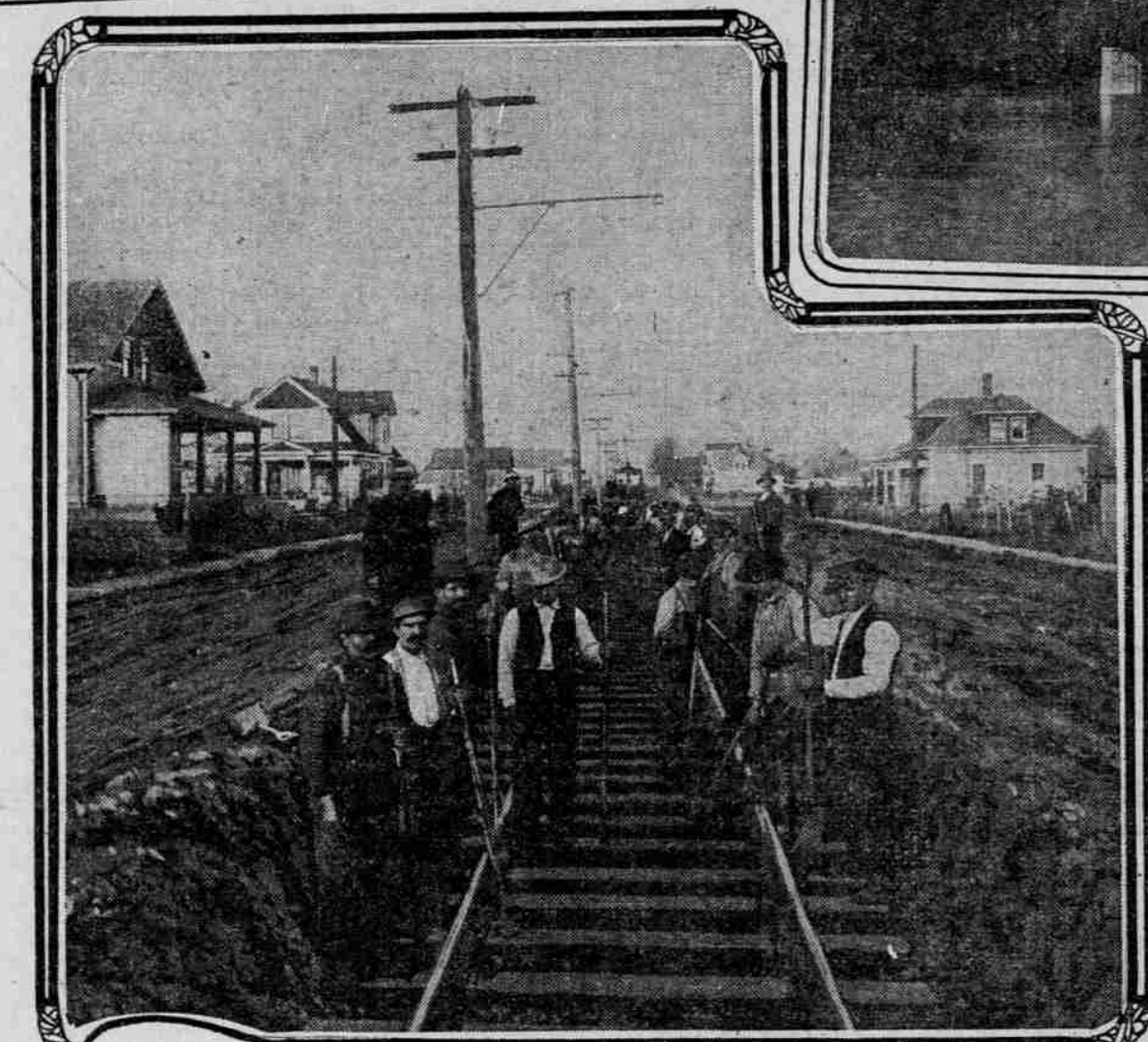
When the beginning was made early in 1912 on the second unit of 240 miles, covering the territory south of Portland as far as Eugene, it was decided to incorporate in the general scheme the various existing city electric street-car lines in Salem, Albany and Eugene and also to add this feature at Corvallis. The ownership of these lines was, up to their acquisition early in 1912, mainly lodged in the Portland, Eugene & Eastern Railway Company, hence this title for the interurban electric railway organization which is making the entire development. Thus, with the extensive revision of the old lines on the West Side loop to take them through the business centers of all the West Side points above mentioned, and this addition of the streetcar systems in all the other principal Willamette Valley cities, all having freight, express and passenger carrying privileges, it will be seen that the Portland, Eugene & Eastern will be in particularly good position to handle the traffic of all the cities and to interchange same with utmost promptness and economy between city and suburban lines. The city lines are all being greatly improved, some double-tracked and others extended, and important additions have been made to their equipment.

Besides the West Side loop of 100 miles, already described, the Portland, Eugene & Eastern is building its main trunk line south from Portland on the West Side of the Willamette through Oswego, the western suburbs of Oregon City and through the town of Willamette to a point near Canby, where the Willamette River is crossed, thence to Salem, thence to Independence, Albany, Corvallis and Monroe to Eugene, about 121 miles.

Continuing from the West Side loop at St. Joseph, the West Side electrification will proceed southward by way of McMinnville and Dallas to a junction with the main line at Independence. The Portland, Eugene & Eastern will, therefore, afford the people of the great and rich fertile valleys of the west and south a direct route by which Portland may be reached. Absorbing and electrifying the Salem, Falls City and Western steam road the Portland, Eugene & Eastern will have an east and west line through the approximate center of the valley and unite the east and west sides as they have never before been brought together. In doing this it has been necessary to construct an expensive bridge across the Willamette at Salem, which is now practically completed.

New construction which will establish railroad facilities where they have never before existed are the lines from Oswego up the west bank of the Willamette, passing through the western suburbs of Oregon City and on through the town of Willamette Falls and other villages to Canby, this necessitating another bridge across the Willamette River, construction of which is just starting; also the line from Canby to Salem via the Molalla Valley and Silverton and that from Monroe to Eugene. Other interurban construction of considerable importance to the cities of the valley are the lines now being constructed from McNary to Independence, serving the hop-growers along the low lands on the east and the orchards on the uplands to the west, and that from Albany to Wellsdale, which traverses a famous fruit and garden country, in six miles of which 241 families now reside; another which brings the gardens and fruit lands of Santa Clara within 15 minutes of Eugene, and still another which will reach from Salem southward through the greatest prune district in the Northwest to Rosedale.

Of the new districts which the building of the Portland, Eugene & Eastern brings to the door of Portland and makes available to settlement, the



Laying P.E. & E. Track At Salem.

two most important are the Molalla Valley and the district between Corvallis and Eugene, with Monroe as the central point. The Molalla country is a splendidly diversified valley, bench land and foothill district that is capable of supporting many thousands of homes where comparatively few now exist. Although it will be within an hour's ride of Portland, its comparative isolation has so restricted its growth that it may be classed as almost a virgin field. The building of this road makes the Willamette Spring resort easily accessible, together with the superb fishing, hunting and recreation district and the great timber regions lying to the east of the springs.

The Monroe, Alpine and Bellefontaine Valley districts between Corvallis and Eugene compose one of the richest fruit producing sections of the state, and, like the Molalla, are only now coming to a stop if he has withdrawn it. There will also be various important new ventilating, heating, lighting, sanitary and safety devices. For freight service the equipment includes a full quota of the most powerful electric locomotives and cars. Much of this equipment is now nearly ready for delivery and all will be delivered during 1913. Very complete shops, with full equipment to handle all repairs, have been authorized. Plans of the shops are complete and their construction in one of Portland's suburban cities will be taken up at an early date.

The total outlay involved in the entire project is about \$12,000,000. These figures, imposing as they are, hardly convey an adequate idea of what it really means to Oregon, for, viewing it in all aspects, the Portland, Eugene & Eastern is probably the most extensive and notable of all the many new electric railway developments now in progress in the United States. This refers not merely to the work now on hand, but also to its probable future extension under necessary favorable conditions.

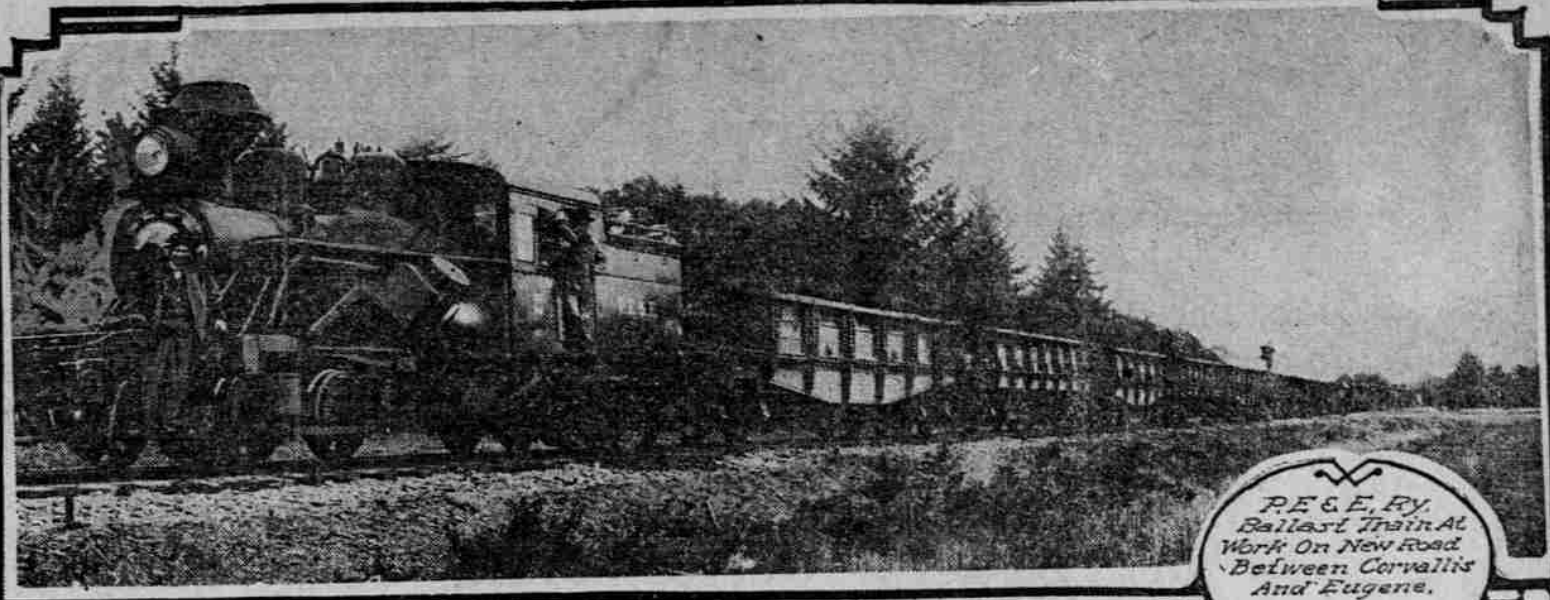
When it is all done, the Portland, Eugene & Eastern tracks will be available for moving far more quickly and conveniently, the produce of orchard, dairy and farm, and will with equal facility carry back to the shippers those comforts which make rural life more and more attractive.

Perhaps no other element has accomplished so much in development of farming communities as has the electric railroad, and this, in turn, is reflected in the growth of the cities. Invariably the lands have been cut into smaller holdings, more intensive farming methods are adopted, modern

parlor, observation cars and all up to date in every detail, including the pantograph (instead of the usual trolley), an attachment for carrying the current from the high tension wires, which it is impossible to disconnect or throw off, and which steadies the car and reduces the dangers of accident to the minimum. Another feature will be the new automatic power control, which compels the motorman constantly to press his hand against the controller arm, or, if he comes to a stop, he has withdrawn it. There will also be various important new ventilating, heating, lighting, sanitary and safety devices. For freight service the equipment includes a full quota of the most powerful electric locomotives and cars. Much of this equipment is now nearly ready for delivery and all will be delivered during 1913. Very complete shops, with full equipment to handle all repairs, have been authorized. Plans of the shops are complete and their construction in one of Portland's suburban cities will be taken up at an early date.

The most direct and tangible of the benefits will, of course, be in the reduced freight rates. During the present season ocean freights on grain from North Pacific ports have seldom fallen below 39 cents a bushel, while the normal rate is never less than 29 cents a bushel. Compared with these figures we find that the Middle Western and Northwestern farmers, who market their grains through Chicago, enjoy normal rates of 8 cents to 10 cents a bushel from Chicago to Liverpool or continental ports; and even during years of abnormally high freights, such as now prevail, their rate seldom reaches more than 12 cents a bushel. The addition by means of lower

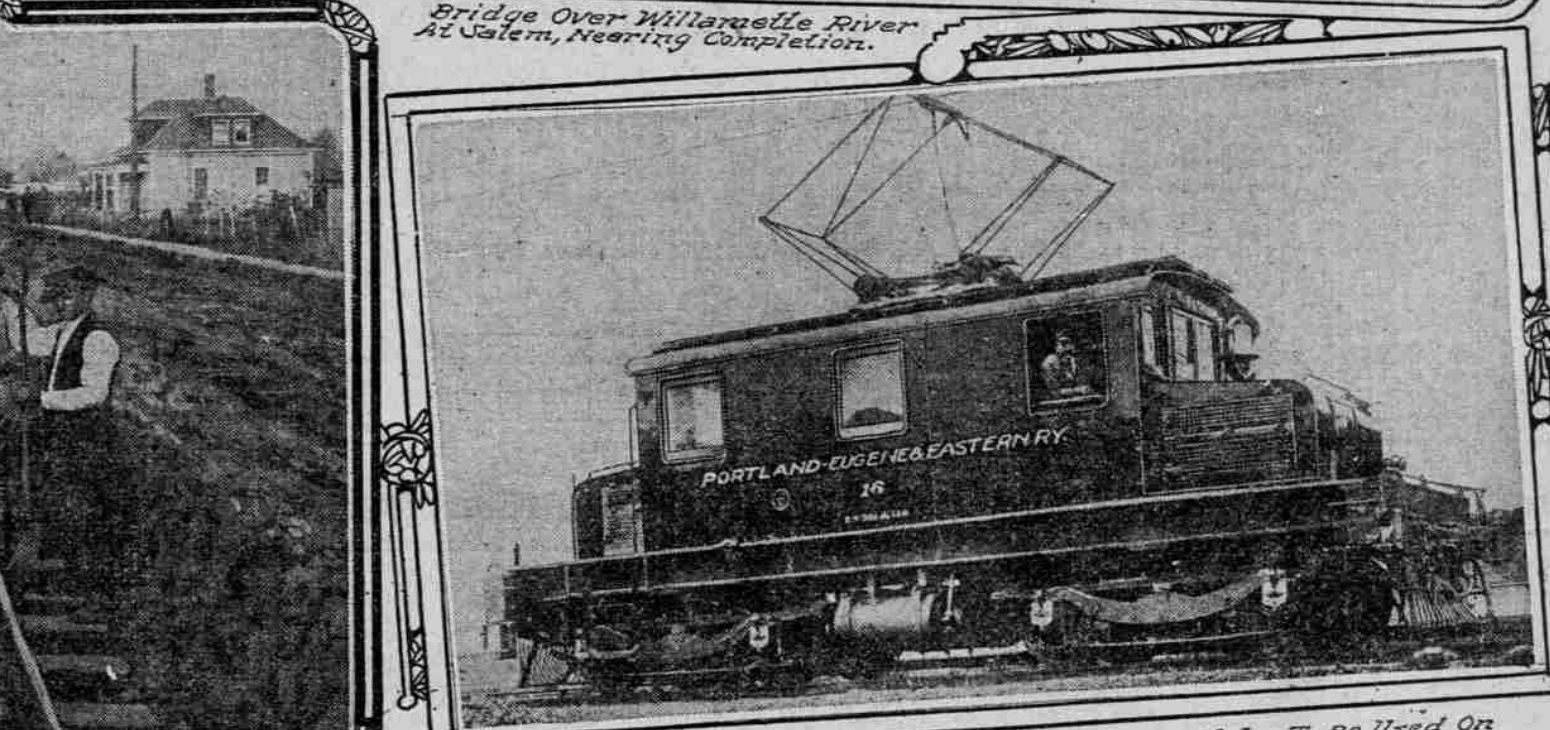
freights of 10 cents a bushel to the profits of the wheatgrower in Oregon, Washington and Idaho would in most seasons mean the difference between a marginal and a profitable crop, especially important in the semi-arid regions of Eastern and Central Oregon, where there are several million acres of land which, with proper cultivation and a low freight rate, can be made to show good returns. Even were there no addition to the output, the canal will enable our farmers to compete with the Middle Western farmers on practically even terms. Through being enabled to put their stuff into the European markets in practically the same time as is now consumed in handling the product grown farther East, they will have opportunities for taking advantage of the sudden fluctuations in price. This great advantage is impossible so long as our produce is from three months to six months in reaching its destination, as is now the case.



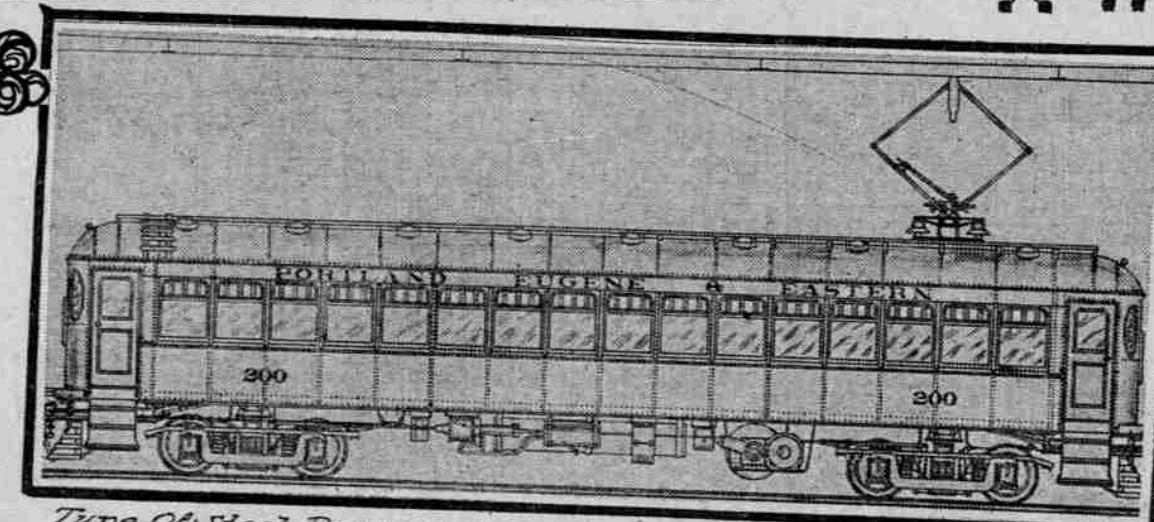
P.E. & E. Ry. Ballast Train At Work On New Road Between Corvallis And Eugene.



Bridge Over Willamette River At Salem, Nearing Completion.



Motor To Be Used On P.E. & E. Railway Electric Lines.



Type Of Steel Passenger Car To Be Used on P.E. & E. Electric Lines

homes are erected and children whose education has been limited to a few terms at the district school have, through convenient access to the higher institutions, been enabled to broaden their studies and become more useful citizens of the country. The interurban train brings the college and the home in touch, the children for 50 miles

around can attend any one of Oregon's great educational institutions and sleep under their parents' roof at night. The quickening and elevating

influence of churches, theaters, daily papers and libraries, and of close touch with the business centers, as well as the invariable prompt creation of close-



P.E. & E. Bridge At Springfield.

GRAIN TRADE OF NORTHWEST WILL GAIN IMPETUS FROM OPENING OF WATERWAY

Reductions of 50 Per Cent in Freight to Europe and Even Greater Cut to American Ports on Atlantic Will Affect Big Industry.

By E. W. Wright, Manager Merchants' Exchange.

THE grain trade of the Pacific Northwest has always supplied a large proportion of the water-borne tonnage out of North Pacific ports that the influence of the Panama Canal on that trade cannot well be overestimated. With the possible exception of the lumber traffic, no other commodity approaches it in volume. The completion of the Panama Canal, with its short route to the European markets, will present so many advantages that their relative importance is not easily determinable.

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freights of 10 cents a bushel to the profits of the wheatgrower in Oregon, Washington and Idaho would in most seasons mean the difference between a marginal and a profitable crop, especially important in the semi-arid regions of Eastern and Central Oregon, where there are several million acres of land which, with proper cultivation and a low freight rate, can be made to show good returns. Even were there no addition to the output, the canal will enable our farmers to compete with the Middle Western farmers on practically even terms. Through being enabled to put their stuff into the European markets in practically the same time as is now consumed in handling the product grown farther East, they will have opportunities for taking advantage of the sudden fluctuations in price. This great advantage is impossible so long as our produce is from three months to six months in reaching its destination, as is now the case.

The wheat traffic, up to the present time, has not only been obliged to bear the burden of its own transportation to market, but it has also been obliged to carry a large portion of the burden for inward cargo. The proportion of vessels coming here with inward cargo has been so small that, in nearly every instance, shipowners have demanded,

and have been paid, a rate based on the inward voyage being made in ballast. Both the foreign exporter and the North Pacific importer have taken advantage of this peculiar condition and have used it to get inward rates down to a figure that in many cases hardly paid for loading and discharging the cargo. In some cases division of the service was made on a basis of less than \$1 a ton for the inward freight, while the outward grain freight, at the same time for practically the same distance, was fixed at \$6 to \$7 a ton.

The population of the Pacific Northwest is so small in comparison to the amount of grain that is grown that we have available for export a much greater proportion of the crop than is available in any other portion of the United States. This also militates against the prosperity of the grower, for if we could consume more of the crop, or all the crop, the money that is now paid out for ocean freights could be saved. It has been a great many years since North Pacific flour mills were able to sell much of their product in the European markets, a normal freight rate via Cape Horn or the Suez making it prohibitory. The Panama Canal will make possible an outward rate on flour so low that much of the grain that now goes out in its

ly knit, thrifty and enlightened communities, where only the lonely farmhouse existed before, are other results which have invariably followed the establishment of large electrical railway systems.

It being true that the higher farm development follows the electric road, it must then be true that every city, town and village of the Willamette Valley will show a corresponding growth in population and in business activity. This has been true of Los Angeles, Detroit, Spokane, Salt Lake and of every other district in which electric railway systems have succeeded steam operation. The growth of Los Angeles has been almost exactly in proportion as the Pacific Electric was extended and as the system's business has grown. Ninety-five per cent of suburban development of tributary country within the 100-mile circle in the past 10 years has been along the line of the Pacific Electric. It is our hope in time to duplicate that great system in Oregon if, happily, we receive the necessary co-operation of the regions to be served, not only in the matter of adequate financial returns upon our large initial investment, but also a reasonable guarantee of permanency by insurance of fair and liberal treatment from state, municipal and other authority charged with legislative or other supervision.

natural state will be ground at home and the product shipped to Europe and the Atlantic seaports.

While the soil and climate of the Pacific Northwest are in most localities better adapted to the production of the cereals than in almost any other part of the country, our present tax methods of farming result in an average yield per acre of less than one-half that which is attained by the European farmers. Incidental to its other benefits, the low rates via Panama made by European steamers will undoubtedly encourage a large immigration of the thrifty farmers of the old world. This not only will be of direct benefit to our entire economic system. Fifteen years ago American exports of wheat and flour were valued at less than 200,000,000 bushels, and several seasons the total was in excess of 225,000,000 bushels. In striking contrast to these figures are the present shipments of from 70,000,000 to 80,000,000 bushels yearly.

Meanwhile home consumption is steadily increasing and it is but a question of a few more years before the demands of the territory east of the Rocky Mountains will be such as not only to require all the wheat grown in that territory, but also much, if not all, of the available surplus from the Pacific Northwest.

While the Panama Canal will reduce freight rates to European ports more than 50 per cent, it will make an even greater reduction between the Pacific Coast and the American ports on the Atlantic Coast, as the ships which come out from the Atlantic Coast ports with merchandise and similar cargoes for the Pacific Northwest will be enabled to make such low eastward rates that a much more advantageous market will be found in that field than in Europe.