

PHASES OF INDUSTRIAL GROWTH IN THE STATE OF OREGON

IRRIGATION IN LIFE OF SOIL

consist of a sort of sod and grass which projects over the water for several feet and floats on top. I believe that men could go along with knives and cut this off, and these chunks would settle to the bottom and would not need to be taken out.

"It, however, would be an easy job for a dredger to cut off the projecting banks and throw the earth up along the shore. After looking the river over carefully, we concluded that \$500 expended will put the river in shape so that a boat can run up as far as the Melrose bridge."

Report on Cascade Locks.

Major Langfitt's report on the Cascade Locks is interesting reading. The summary of the year's traffic is an indication of still greater things to come when the Cello Canal is opened. The following are the official figures:

During the year 1904 boats passed the lock carrying 82,500 tons of freight and 64,400 passengers. The tonnage of these craft amounted to \$79,073. Bound down, 25,260 pounds of wheat passed through the locks, encumbering four shipments amounting to 1,706,000 pounds, while miscellaneous grain shipments amounted to 4,257,000. The fruit shipments amount to 1,676,000 pounds.

Joint Wells in Crook County.

The Madras Pioneer tells of a meeting last week of farmers in the district known as the Agency. It is the northern part of Crook County, the results of which will be watched with much interest. Premising that this semi-arid district has been the scene of the operations of the Government land, the results of which will be watched with much interest.

The land is level, and every farm could be reached by wells sunk to a sufficient depth and of sufficient capacity, at present the water is handled in tanks and barrels from Madras to the farms. The farmers have arranged to combine to have sunk community wells, to a depth of not less than 400 feet, when an abundant supply of water is believed to be obtainable. The cost being divided will be brought within the reach of every farmer interested. The surplus of wheat for the season was 1,706,000 bushels. The distance to railroad is too great to make it pay to haul. The lack of water for their stock forbids the raising of stock, and the farmers are producing their products of grain. Therefore the fertility of their soil is a barren gift. Success in the well sinking will remedy all.

MUNICIPAL ENTERPRISE.

Operations of Water Plants for Cities and Their Cost.

The Hood River Glacier prints the following item:

"A resident of Goldendale furnished the following interesting figures concerning the cost of water supply and ownership in connection with the operation of the water plant at that place:

The city was bonded in 1890 for \$10,000 to install a system of water works, and about \$10,000 more was expended in 1903, making a total amount of \$20,000 invested. Up to about two years ago the water was furnished by Hess & Cooper for \$1200 per year, but at that time the city bought the pipe line at a cost of \$6000, and now the city owns all its water system.

"The revenue received by the city from the water is \$2400 per year and the cost of maintaining the same is about \$600, leaving a net income of about \$1800, or in other words the system is paying for 75 per cent interest on the capital invested."

The Sherman County Observer follows suit with this:

"The city has bonded indebtedness of \$72,000 for its city water plant. The bonds come due in about seven years. Of this amount, \$5,000 is for the first year. Sufficient funds are now on hand to pay the interest on the bonds, and the city has paid on this fund offsets the interest paid to the bondholders. A sinking fund is also rapidly accumulating for the later years of the system, so that a few years ago for the first time the city was able to pay the bonds as they came due. When the bonds are due, payment will be made in full. The revenue from the water plant is \$1700 a month in the summer, and about \$1500 a month in the winter. Two men are employed to look after the system at a salary per month of \$65 each. This together with expense for repairs leaves the city over \$1000 a month in the summer and \$800 a month in the winter. In a few years the city will have a handsome income for all city expenses paid directly by the municipal water plant. No light plant to pull its water from the river."

Municipal ownership of waterworks has the longest history of any form of public ownership, and as to it there is less question than about any other form of municipal enterprise. But even here it is very possible to buy gold too dear. There is a great temptation in small communities to borrow more money than reasonable rates for water consumed can pay. The long term future growth is what the insurance people call "doubly hazardous."

On this page is shown an illustration of writing and making wild hay on one of the fertile lands in the Klamath country. Hundreds of tons are annually made from the wild grasses of Nature's providing. In winter the waters of the lake spread over the margins of level land, gradually receding as the season advances. In olden days, when Fort Malheur was inhabited by United States soldiers to hold unruly Indians in check, as much as 800 tons of hay was annually taken to be put up for the use of the cavalry at the fort.

Wood River is a stream running northwards from its mouth end of Klamath Lake in the direct line of the lake. No one ever heard of it as navigable, but a story from the Klamath Republican adds another to the increasing list of Oregon developments. The improvement which has not yet found its way into the river and harbor bill. But the best kind of improvement, after all, is that taken in hand and carried through by the good sense and strong arms of people directly interested.

W. S. Warden, secretary of the Klamath Chamber of Commerce, speaks:

"The boys are all in line and ready to assist us. They are ready to put up money, or will turn out and work to help cut the channel. I was all over the valley, and everyone is busy and prosperous. The whole valley looks green, and it is the prettiest country in the world, as everyone knows. All of the ranchers are busy cutting hay at present, and it will not be possible to start the work until the hay is finished.

"Frank Butler, secretary of the Fort Klamath Chamber of Commerce, and J. W. McCoy, the president, stated that there were absolutely no doubt but that everyone in the valley would give their support to this work.

"The boys are acquainted with the river above the bridge, and know practically what it will take to put it up. I wanted to satisfy myself about the river below the bridge, and Gus Melrose and myself came down in a skiff.

"I found that there is plenty of water all the way. The stream has not got so far as the mouth of Crooked Creek. From there up we counted about 12 points that would have to be cut off to straighten the river so that the boats would go up. Above Crooked Creek for a mile or a mile and a half the river narrows down to about 20 feet, but the banks are not solid, and



HOW THE MARSH HAY IS CARED FOR.

SITUATION AS TO HOPS

WRITER GIVES ARGUMENTS IN FAVOR OF COMBINATION.

Study of Conditions Should Enable the Grower to Judge of Advantages.

A letter from a well-known hop grower is printed as giving a full statement of arguments of growers for entering the proposed combination. His suggestion that the Oregonian article was inspired by a desire to carry out their business, if every hop grower in Oregon should put his name in one corporation as proposed by Mr. Krebs and should take his pro rata share of proceeds of sales would fare the same as his fellow-grower—neither better nor worse. He would get rid of the annoyance of the hop-grower. He would not rush his crop on the market and thus help in lowering prices. Neither would he, by holding too long, lose the benefit of fair offers. He would help out his neighbor's throat and would be afraid of his neighbor helping to cut his. The proposition seems to me to be fair and reasonable. The selling committee of the corporation would go into the markets of the world or sell to local buyers as they saw fit. Buyers would buy from the corporation as readily as from individuals, and there would be no such thing as a monopoly as there is under present conditions. The saving in samples' commissions alone, about \$60,000 or \$80,000, ought to pay all expense of selling the crop. More intelligence on the part of growers in perfecting the proposed plan, it is almost certain California and Washington will follow suit. Steps are now being taken in California to that end.

"I do not expect that all the growers of either state will go into this combination, for two reasons. First, the influence of those who are antagonistic will deter some, second, there will be those who will desire to see the plan perfected, but who, for their own self-interest, will stay out. I am sure that the majority will desire to accomplish all they desire, and at all times they will be ready to help out their neighbor. We do not dream of fixing the price of hops for the world, but we do hope to see the hop-grower get a fair price for his crop. We do not dream of fixing the price of hops for the world, but we do hope to see the hop-grower get a fair price for his crop. We do not dream of fixing the price of hops for the world, but we do hope to see the hop-grower get a fair price for his crop.

DRY LAND SUITED TO WHEAT

Baker County Claims Its Equality With Umatilla.

The growth of wheat on the dry uplands of Eastern Oregon is shown in the following item from the Baker County Herald:

"Baker County can raise just as good wheat as the dry lands of Umatilla County. This has been satisfactorily demonstrated this season. Last Fall J. L. Licklider, who has a ranch two miles south of town, and two acres of winter wheat, was an experiment. Onto one acre of the wheat he turned his stock this spring and after pasturing them for a long time, he is now cutting it for seed. From last year's crop he had cut ten tons of wheat hay. The grain grew rank on the hay acre, but the heads are filled out nicely and would average not less than 20 bushels to the acre. The stalk grew to a height of five feet six inches. Mr. Licklider will grow more wheat next year and harvest it. He brought in a sheaf of wheat to the county fair for the Baker County exhibit at the fair."

The Arlington Record notes that Judge Mariner of Blaine, has successfully introduced a new spring wheat called the Early Wilbur. His field of several acres has just been threshed, and has yielded 30 bushels to the acre. Sowed the last of March it has matured in less than four months on a very light rainfall.

Ten carloads of hogs from Nebraska passed through Pendleton last night en route to the Union Meat Company at Portland. They are to be slaughtered there and sent back in bacon and lard to Pendleton and other interior towns in Oregon.

Shipping hogs 1800 miles from Nebraska to Oregon is the height of folly, for Oregon corn will grow in Oregon almost as well as in portions of the corn belt and hogs are found here in the highest state of perfection, free from the diseases that infect them in the East, and Oregon is losing one of her best opportunities in passing up this profitable industry.

No comment is needed on the foregoing from the Pendleton East Oregonian.

ORCHARDS BEAR HEAVILY

PEACHES FAVORITE CROP ON THE IRRIGATED LANDS.

Reports From Umatilla County and From Grant's Pass Are Highly Optimistic.

In all the irrigated lands of Eastern Oregon great attention is being paid to the orchards, and almost uniform success is reported. Peaches are a favorite crop. From the Freewater Times, of Umatilla County, the following is taken:

"Despite the fact that the peach crop in this vicinity will be very light, there are some orchards that will yield greater crops than ever before. The example of a conservative estimate shows that there will be shipped from this point about 400 or 500 boxes, as against about 2000 last year.

"A number of lots of peaches were brought into this office Monday that are a cure for sore eyes. There is a five-inch twig upon which are clustered nine peaches so closely imbedded that they look like one huge peach. Another peach that was in the lot measured 5 1/2 inches in circumference, and there are some large ones yet on the trees.

"Marion Graham is the owner of the trees that bear this luscious fruit. The peaches are known as the Triumph and are almost purely a home product. A Grant's Pass orchard, where the writer counted 47 peaches, well developed, on a two-year-old tree. The fruit grew on untrimmed slender branches nearly six feet long, and not three-quarters of an inch thick at junction with the stem. Needless to add that the owner had furnished supports, over which the branches were trained.

An invaluable aid to the prune-dryer on a large scale is the dipper and spreader. The following note from the Polk County Observer draws attention to the saving in time gained by this apparatus, which, as well as more even quality, results from its use.

"I. Chapman is making extensive improvements and repairs on his big prune-dryer north of town, and will soon have one of the most completely equipped evaporating plants in the valley. The work is nearly completed, and the dipper and spreader will be ready to handle the present year's output of Mr. Chapman's 40-acre orchard.

"The principal addition to the plant is a dipping and spreading machine of the latest pattern. This machine dips the prunes in a live bath, rinses them in running water, and spreads them on the tray. It will dip and spread 500 bushels of prunes a day, and is a valuable labor-saving device. The machine will materially increase the capacity of the dryer, as prunes dipped in wet dry in about six hours less time than those not similarly treated."

MINING MAKES PROGRESS

OCHRE QUARTZ FOUND IN JACKSON COUNTY.

Medford Mail Tells of Discovery Recently Made Verifying an Old Prospector's Tale.

Progress is reported in mining from every district. A romance of mining appeared in an extract from the Medford Mail. The site of the find is in Jackson County, and so is brought to a dramatic conclusion a tale which has been circulating for a good many years in these mountains. The Mail says:

"E. C. Faucett was in Medford Tuesday, having come in to have a piece of ore assayed. The stake he had taken from a ledge six miles west of Sterling Mountain. The ore showed values of \$35 to the ton of gold, and the ledge from which it comes is 12 feet in width and has been traced by Mr. Faucett for several miles on both sides of the mountains. The ore is ochre quartz in a gneiss formation and is the only ledge ever found of this kind in the Sterling range. And thereby hangs a tale. Forty or more years ago a German prospector came through from the other side of the mountain and exhibited a piece of ochre quartz. A boy which he said he had found somewhere near Sterling Mountain, describing the place as well as he could. The man to whom he showed the ore paid little attention to it, as in those days the bars along the Applegate afforded rich diggings. Finally, after the original finder had been traced by Mr. Faucett for several miles on both sides of the mountains, the result showed \$66 in gold to the ton. Then commenced the hunt for the ledge from which the peculiar-looking piece of ore had come. Nothing like it had ever been seen in that range before and it would seem easy to find it; but the searchers returned empty-handed. For over 30 years prospectors have hunted for that mysterious ledge of ochre quartz without success.

The finder himself has put in several seasons looking for it. At last the ledge was found, as many other valuable mines have been found by accident. Last Spring, while on a prospecting trip, Faucett's horses escaped from him, and while following their trail he noticed a peculiar-looking piece of rock and naturally picked it up. It was the ochre quartz.

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TWO PRODUCTS IN WHICH THE STATE IS RICH.

Oregon Is Just Awakening to the Value of These Elements in State's Development.

Until recent years platinum was mined only in the Ural Mountains of Russia. It has, however, been found in various parts of the United States, and though 110 ounces were all that was reported last year. Its existence in Oregon has been known for several years. The Ashland Record reports over 12 ounces as having been cleaned up at the Deep Placer mines of Waldo, in Josephine County. The black sands of the ocean beach are also a source of supply in very small quantities, but from one of the beach mines, it was reported last week as doing well in gold and taking out several ounces of platinum.

Professor David T. Day, of the United States Geological Survey, in charge of the experimental plant at the Lewis and Clark Fair, reports that he has identified, not only platinum, but rarer metals, as found by him in the samples of black sand sent him. Inasmuch as tests are made free of charge, with transportation paid, and full returns made on sands sent to the Exposition, so valuable an opportunity should not be let pass. The opportunity is offered to have the value of the sand of the United States Government, the many stories current of valuable discoveries all over Oregon.

Lime is one of the products of Oregon almost neglected up to this date. Quantities imported have been and are very large. It is interesting to note that from Huntington, in the extreme east of the State, the quality of lime is the extreme south, new quantities of the opening and enlargement of industries which will remove this reproach. The Democrat, of Baker City, has the following item:

"At Lime, five miles west of Huntington, and on the O. R. & N., is the scene of operations of the Oregon Lime & Plaster Company, which employs 25 men. Ladd, the Portland banker, is president and treasurer, and Charles F. Beebe, secretary and manager.

"The manufacture of lime will be the main business of the company, and an additional kiln will be built, giving a capacity of 500 barrels for each burning in three days. The marble is blasted from the cliff and rolled down a chute into the mouth of the kilns. Pine wood is used in burning, and the lime produced is a milk white, absolutely free from iron, and is of the best quality. It is a down-hill haul of 12 miles from the quarries to Grant's Pass, but the company has in view the building of an aerial tramway from the kilns to the Applegate River, thus shortening the wagon haul by four or five miles.

WOOL INDUSTRY OF STATE

NORTH BEND MILLS MAY BE SOLD TO EASTERNERS.

Work at Scouring Mills of Pendleton and Shearing of Sheep by Machinery in Lake.

The announcement that at last the railroad building is to reach Coos Bay by an early date will confirm many in their belief that the time has come to start the wool industry there. The woolen mills have had a checked existence, but it is hoped that a new chapter is about to be opened. Started at Bandon, the mill was moved to North Bend. The arrival now expected of the intending purchasers from the East will give the signal for trial runs. If these prove successful a fresh start under experienced men is to follow. August 19 is the day named. After the removal from Bandon of the mill in question, another mill was erected at North Bend. The wool industry is, in Oregon, capable of indefinite extension.

Reference was made last week to the scouring mills at Pendleton. This week the East Oregonian summarizes the results of the season's work as follows:

"During the past season 1,600,000 pounds of wool have been sorted and placed in the subs for cleaning, and of this amount 600,000 pounds of the finest kind of fleece

wool has resulted. It will be seen that there is a loss of about 75 per cent from sand, tar, grease and other foreign materials in the wool as it comes from the sheep's back.

"According to the figures of the management of the scouring mills, wool approximating \$300,000 has been handled by the scouring mill during the past year, to say nothing of the value of the grease wool that has been graded and sent to The Dalles and to Boston for scouring. It has been figured out that the handling of this wool in this section of the state has resulted in leaving about \$75,000 in circulation, amount all concerned. The weekly pay-roll at the local scouring mill has been \$600 per week, and this continued during the season.

The shearing plant closed down last Thursday after about a six week's run. The first season was a successful one and the fact that hand shearing is doomed has been clearly demonstrated. Machine shearing is a trifle more expensive per head than hand shearing, but the amount of wool is greater and the time of shearing much less. In all about 3,000 sheep were sheared at the plant this year. The machinery did not arrive until late in the season, and the plant had a short run. Next year, no doubt, most of the Lake County sheep will be sheared at the plant.

The Heppner Gazette deals as follows with this season's conditions between the sheep men and the miners in the southern Summer ranges of the Blue Mountains:

Sheepmen and the Miners.

"Quite a number of sheepmen have driven their flocks into the Sumpter district this season, and all state that grass conditions were never better than at present. The sheepmen are understandingly anxious to exist between miners and stockmen, as less threats are heard against the latter than in former seasons. This is accounted for from the fact that the ranges are better protected, and that there is plenty of feed to go around without sheepmen encroaching on the domain of the miners."

MORE RAILWAYS ASSURED

LINE TO COOS BAY WILL BE BIG FACTOR.

North Bank of Columbia Will Soon See Steel Railways Stretching Great Distance.

At last railroad building in and for Oregon is seeing light and progress. None too soon. The California & Northern Railroad filed its articles of incorporation in San Francisco on July 5, with a capital of \$3,000,000. A. H. Nattager is the president. One terminus is at Weed Station in California, the other at Coos Bay, Oregon, a distance of about 100 miles. In this enterprise the Weed Lumber Railroad is merged by purchase. Extension from the present end of the Weed road to Grass Valley is in active progress, and the completion to Klamath Falls is foretold by President Nattager before the end of 1906.

Meanwhile what is known as the Melting Cloud road is being pushed toward Klamath Lake. It is stated that 25 men are working on this road, which is about 21 miles from Melting Cloud, and it is hoped to cross the mountains before Winter stops building, leaving then about 22 miles to Laird's Gap on Lower Klamath Lake. Obviously San Francisco will be the whole Lake County and Klamath County district tightly to itself before any Oregon road can be started. The road will connect the traffic to the hope of Portland must center in the extension southward of one or other of the roads now heading from the Columbia, or else a new road, eastward from the mouth of the river, from a long-expected road to cross Eastern Oregon from west to east, or southeast.

The next few months will tell the tale, and decide whether the road to Portland is to be the trade center of supply for the southern one-third of Oregon. A big stake hangs on the result, as every one who has any interest in the construction of a link two miles in length, from Henderson to Springfield, both in Lane County. This, with the bringing of the Williamson to Springfield, will connect the main line with the Woodburn-Springfield branch. Thus the traffic can be better distributed, and congestion on the main line will be relieved.

Another major project is the St. Joe cut-off, where grading is well under way. Of course, the important news of the week has been that of the construction of the long-talked-of line from Drain, on the Gouge line from Salt Lake, seeking an ocean outlet from Oregon.

Bargaine residents of Coos Bay seem to be counting the days. The completion of the line will take form before long, as the route is believed to be practicable and not very expensive, and would be ruled by the coast rather than those used in crossing the Siskiyou.

A few days ago the Walla Walla Statesman reported that the right-of-way agent of the Columbia River Railway & Navigation Company had closed contracts with about 20 of the farmers on the north bank of the Columbia. The statement was then made that the construction of a clear opening from Castle Rock into Eastern Washington, and with few exceptions, now being dealt with by Vancouver, is reported to be active on the Portland-Nehalem-Tillamook Railway, as far as clearing the first ten miles of the right of way from Harts, on the western bank is concerned. Road grading was arranged to begin three or four days ago.

Development Notes.

Space is wanting to do more than note the statement made a day or two back that it will need 350 average-sized grain-carrying ships to move the 1905-crop of the Pacific Northwest, unless unforeseen changes in European markets divert or curtail on the Coast any large proportion of the crop.

The announcement was made last week that the independent telephone system built by the residents of the Waldo Hills had brought over 50 more families into hearing of Salem, and thereby into close touch with the world outside. Other lines radiating from Salem are also in construction. So that before long it will be voluntary, not compulsory, isolation if the Marion and Polk County farms are not connected with their neighbors and with the Capital City. An example here for other neighborhoods to follow.