FERTILE FARMS of OREGON

PORTLAND'S wheat shipments (flour included) for the year just ended were about 12,000,000 bushels. This amount has been exceeded several times in the past, but on account of the higher prices prevailing this season, the net returns from the crop will probably be very close to the best on record. Unfavorable weather last Spring materially cut down the wheat yield of both Oregon and Washington, Idaho alone of the North Pacific States showing a good yield last year. The shortage of the three states as compared with the yield of 1902 was between 8,000,000 and 10,000,000 bushels. On account of the O. R. & N. lines traversing that portion of Washington where the best crop was produced, the shipments from Portland for the season will show a much lighter decrease than is noticeable from Puget Sound. The crop of the Willamette Valley last year was slightly better than its predecessor, and the quality was uniformly good.

On account of the light crop and the fact that the greater part of the crop of 1902 moved out prior to January 1, the shipments for the calendar year were much lighter than usual. They were sufficiently heavy, however, as will be seen by tables printed elsewhere, to exceed those of any other port on the Pacific Coast by a margin of over 2,000,000 bushels. The most striking feature of the grain trade of 1903 was the immense demand for both wheat and flour from the Orient for in the past six months the shipments from Portland for Japan and China have broken all former records, the flour shipments from Portland to Oriental ports being three times as large as for a corresponding period in the previous season, while wheat shipments to Japan have amounted to more than 500,000 bushels. The light wheat crop in California was insufficient to enable California millers to secure enough wheat to supply the demands for flour, and the exporters of the Bay City were unable to meet tonnage engagements with the scanty stocks available. This forced them to come North for supplies, and Oregon dealers shipped over 1,000,000 bushels to California at figures ranging well above the export value of the cereal.

Year of Cheap Tonnage.

Never in the history of the grain business out of North Pacific ports has the trade enjoyed so long a period of cheap ocean freights, and throughout the entire year it was possible to ship wheat to Europe at a figure below the actual cost of moving vessels. The terrific slump in rates to Europe, also affected the Oriental freights, and despite the fact that offerings for the far East were heavier than they have ever been in any previous year, rates have ruled lower than ever before, flour in some cases being carried from Portland to Hong Kong at the rate of $2.40 per ton. As all of the decline in freights has gone to the wheatgrowers, the disadvantages of a poor wheat crop have in a large measure been overcome by the increased profits on what was produced.

It is yet too early to ascertain the exact figures on the Oregon crop, as much of it is yet in the interior, but from present indications it will be about 10,000,000 bushels, possibly a little more. The Willamette Valley which first gave Oregon a reputation as a wheat state has been gradually drifting into diversified farming so that it may be said to have reached its limit in wheat production, but the possibilities for development in other portions of the state are still very great. This is especially true of the Central Oregon district, which is to be opened up for production by the extension of the Columbia Southern Railroad during the coming Summer, and by the road project from Arlington out through Gilliam County. Both of these roads will open up districts susceptible of producing a large amount of wheat, some estimates of the amount possible under favorable circumstances when the country becomes fully developed, placing it as high as 8,000,000 bushels without taking into consideration the irrigated lands of the district traversed by the projected roads.

Big Cargoes of Flour.

In the flour trade, Portland's record for the year just closed is a remarkable one. The exporters of this city not only shipped more flour than they have ever shipped before, but they shipped more big cargoes of this commodity than have ever been shipped from any other port on earth. Included in this list of big cargoes was that of the steamship Algoa, which exceeded by over 15,000 barrels that of any other flour cargo ever carried to sea. It amounted to over 85,000 barrels, and, in addition, the steamer carried 500 tons of wheat. The Oriental flour trade of the Pacific Coast was practically started by the Portland Flouring Mills Company, of this city, and they have never lost their hold on it. The demands of the far Eastern buyers have been so heavy that the Portland firm has been continually adding to its system of mills in Oregon and Washington until it now controls plants having an aggregate output of nearly 20,000 barrels per day, and will at once commence work on an addition to the Portland mill, which will increase its capacity from 2400 barrels per day to 4500 barrels, thus making it the largest mill on the Pacific Coast.

If the Oriental flour trade increases as rapidly in the next ten years as it has in the past ten years, even the increasing yield of wheat in the Pacific Northwest will be insufficient to admit of anything more going to the European millers, and everything that is not required for home consumption will be sent across the Pacific in the form of flour for the Oriental buyers, who are now just beginning to use flour as a regular article of food.

Oregon does not produce very much barley, but handles the larger portion of the crop of that cereal that is grown in the State of Washington, the barley district lying along the lines of the O. R. & N. Co., which are tributary to Portland. The industry is a comparatively new one in Washington, and this year, for the first time, the foreign exports of the cereal from Portland are in excess of 1,000,000 bushels, with a considerable amount yet to come forward. The details of the wheat, barley and flour shipments, as well as those from Puget Sound, will be found in the tables printed elsewhere.

BIG PROFIT ON HOPS.

Year's Crop Worth Nearly $3,000,000, Oregon Leading World.

HOPGROWERS of Oregon have found the year 1903 very profitable, both in financial returns from the crop, and in the improvement of conditions under which the grower works. At a time when only about half of the total crop has been marketed, the total yield for the state is estimated at 80,000 bales of 185 pounds each, or 14,800,000 pounds. The average price received up to December 1, was about 20 cents, and the outlook is favorable for an advance rather than a decline. At this price, the total return to the growers will be $2,960,000. At an average estimate made by growers who take good care of their yards and hire all their work done the cost of production is about 8 cents a pound, so that the net profit to the grower is $1,776,000. As practically all of the crop is sold outside of the state, and production requires no expenditures of consequence outside of the state, the hop crop is practically a total profit financially to Oregon.

Oregon Leads the World.

Oregon has become the leading hop-producing state in America, and the Oregon hop has gained an excellent reputation among brewers of this country and England. The estimated yield of hops in this country in 1903 is as follows:

Oregon	80,000 bales
California	50,000 bales
New York	50,000 bales
Washington	35,000 bales
Total crop of United States	215,000 bales

The United States is this year one of the leading hop-producing countries of the world. The favorable conditions of climate and soil which prevail in Oregon, and which have forced a steady and healthful growth in the hop industry, bid fair to make Oregon one of the best-known hop-producing sections on the globe.

Benefits of Spraying.

Two events of the past year have been of immeasurable benefit to the hopgrowing industry in Oregon. A short period of inclement weather just before the time for picking caused mold to appear in some yards that had been poorly cared for, and the hops were slightly damaged. In a few yards the damage was so great that the hops would sell for only 10 cents per pound, which was little more than the cost of production. While the quantity of hops thus injured was comparatively small, the experience of the year served to demonstrate beyond reasonable question that, in order to protect a hopyard against the danger of mold, the grower must spray his vines at the proper season. The results of this season's work have shown that where hopvines were thoroughly sprayed there was no injury from mold, but where they were not sprayed the damage was the greatest. Some yards not sprayed suffered no injury, but the results as a whole have left no doubt as to the necessity for spraying in order to make a yard proof against mold. In many seasons the spraying will prove to have been unnecessary, but when the unfavorable season comes the grower who sprays is sure of a clean crop. In other words, spraying has been proved to be a profitable form of insurance against damage from inclement weather.

One-Sided Contracts Invalid.

The other great event in the hopgrowing industry this year was two decisions of the courts, in which growers won out in suits with dealers. The suits grew out of hop contracts of a form that has been in use in this state for years. The contracts were so drawn that, according to the strict enforcement of them, the grower could be compelled to deliver his hops at the price stipulated, but the dealer could not be compelled to receive them. Under such contracts growers were forced to deliver if the price remained good or advanced, while if values depreciated the dealers rejected the hops and left the growers to bear the loss. There were many exceptions to this rule, but the instances in which the growers were left "holding the empty sack" were so numerous that, on the average, the hop industry was not profitable to the grower. The heavy expense incident to the harvesting of the crop compelled a large proportion of the growers to borrow money for picking expenses, and this money was most easily procured from dealers upon contracts of sale. The suits decided this year grew out of contracts by which the grower agreed to sell his hops at about 11 cents, but at the time the hops were ready for delivery the price had advanced and the grower refused to consider the contract as other than a security for the money loaned. He returned the money and suits resulted. In the Circuit Court it was held that the contract was one-sided and could not be enforced. In the Supreme Court the question whether the contract was unilateral was not passed upon, for the decision was in favor of the grower upon the point that the contracts were executory, and could not be enforced by replevin. The good resulting from these suits was not that it enabled a grower to repudiate a contract made by him, but that it brought about a change in the form of contract in use, and now the contracts are so framed as to be binding upon both the grower and dealer. This change places the hopgrowing industry upon a much better business basis.

PROFIT ON ONE HOPYARD.

Acres producing	44
Crop raised, pounds	16,046
Gross selling price at 25½c	$4091.73
Cost of production	1192.42
Net profit	2899.31
Profit per acre	362.41

HOP CROP OF OREGON IN 1903.

Total yield, pounds	14,800,000
Average price, cents	20
Total returns	$2,960,000
Profit to growers	$1,776,000

Skill and Weather Affect Results.

As with every other enterprise, the profits of hopgrowing vary with the character of the land upon which the hops are grown, the skill of the grower, and the fluctuation of the hop market. A hopyard may be operated upon a plan which will keep expenses down to the extreme limit, but the yield will not be the best, and there will be danger of damage from mold in case of inclement weather late in the Summer. As stated above, the highest estimate of the cost of production is 10 cents a pound. This estimate has been made by H. J. Ottenheimer, who hires all his work done, pays good wages, keeps his yards in perfect condition and spares no reasonable expense that promises to improve the quality of his product. There are quite a number of growers who conduct their yards on that plan. There are others, owning smaller yards, who do the work themselves during most of the year, and who claim to be able to cut the expense of production down to 6 or 7 cents a pound. It may be stated as a general rule that the grower who incurs a greater expense, without being extravagant, harvests a relatively larger or better crop. Ten cents a pound as the cost of production is an outside figure, and 6 or 7 cents is lower than the average grower can produce hops. Probably an average cost of production from year to year would be about 8 cents a pound.

Experience of Leading Growers.

Figures have been published every year showing the financial results of hopgrowing in Oregon. The Salem Statesman is authority for the following figures showing what has been done in some of the best-known yards in this vicinity this year:

One of the greatest hop yards of the valley is owned by Krebs Bros., hop dealers of this city. This year they harvested hops from 224 acres of land, but have not advanced sufficiently with the baling to find the yield per acre. But the average yield, year after year, is 1000 pounds per acre, which would give them 224,000 pounds of hops, and their yards are first-class, as they are growers of long experience and understand the business. Hops are now worth at least 25 cents per pound, making the value of their crop today $55,500. The average cost of production they have found to be 8 cents per pound, but this season, on account of the high wages and the high price of picking, the cost was 10 cents per pound, or $22,400. Therefore their total profit for the year from 224 acres is $33,500. But Krebs Bros. were not satisfied with this. They operated on the grounds, a restaurant, grocery store, refreshment stand, meat market and dance hall, all of which netted them a profit of two-thirds of the cost of picking, or $7840, which increases their profits for the year to $41,640, a profit of over $185 from each acre of ground.

They consider the investment for each acre:

Land	$ 60.00
Trellis and fence	35.00
Planting	2.50
Cultivating first year	10.00
Plowing	1.75
Dry kilns	59.00
Total	$167.75

Thus they receive this year 110 per cent on the money invested. Last year they sold their crop from 135 acres of land for $42,000, at 26¼ cents per pound.

T. A. Livesley & Co., of Salem, own a yard of 112 acres on the river bottom land four miles southwest of Salem. This yard yielded this year 2200 per acre average, worth $550 at 25 cents per pound. The cost of producing the hops was 8 cents per pound, or $176 per acre. Their clear profit was therefore $374 per acre this year, or $81,488 on the yard. Not a bad income.

Catlin & Linn harvested this year 309 bales of hops from 44 acres at Salt Creek in Polk County. The cost of raising and putting them in the bale was 8 cents per pound. They can be sold today at 25½ cents, or 17½ cents a pound profit, or a profit of $13,033 for the yard.

A statement from their book on the crop of last year on their eight-acre yard near Jefferson, follows:

New poles for trellis	$ 3.25
Twine	8.72
Cultivating expense	92.50
Material for spraying	9.45
Labor, spraying	15.00
Repairs on hop house and tools	4.30
Sewing twine, burlap and wood	76.42
Picking 1388½ boxes at 50c	694.25
Labor, dryer and yard help	169.37
Insurance and interest on picking money	63.66
Board for labor during picking	27.00
Labor, baling hops	30.00
Total	$1192.42

Sold 16,046 pounds net hops at 25½c, $4,091.73.

Net profit, $2,899.31.

Per acre, $362.41.

H. J. Ottenheimer harvested 2800 pounds per acre from a portion of his yard southwest of Salem. He estimated the cost of production at 10 cents per pound. Net profit 15 cents per pound, or $420 per acre. The greater portion of this yard yielded about 2200 pounds per acre.

Average Yield in Valley.

As stated above these figures are from the results obtained by some of the most successful growers, who are owners of the best yards. The average yield in the Willamette Valley is estimated to be 1000 pounds per acre. At an average of 8 cents per pound, the cost of production is $80 per acre. At 20 cents a pound, which has been the average selling price up to the present time, the gross return is $200 per acre, and the net return $120 per acre. An averaged-sized hop yard is about 20 acres. While some growers raised 2000 pounds per acre and sold at the top price, 25 cents a pound, a few raised an inferior hop and sold very close to the cost of production. There is good money in hopgrowing for the man who goes into it with intelligence and who exercises good judgment in selling, but, as in every other occupation, there are men who fail entirely.

At present prices of real estate, land suitable for planting a hop yard may be had for from $30 to $100 per acre, according to location and quality of soil. The cost of setting out a yard and cultivating it during the first year, when no crop is harvested, is about $100 per acre. Some may do better than this, but the initial investment will be not much less than $150 per acre. Good upland may be purchased at from $30 to $50 per acre, and rich bottom land at from $50 to $100 per acre.

Opportunity for More.

It cannot be said that there is a great opportunity for engaging in hopgrowing in Oregon. There is abundant opportunity for the man who can make a success of the business. As every one knows, the demand for hops is limited by the consumption of beer. The supply from year to year just equals the demand, though in some years there is a surplus and sometimes a deficiency. A very great increase in the acreage of hops would mean an overproduction and a consequent slump in prices. Statistics of hop production have shown that in New York and in England and some other hop-producing countries, the acreage is steadily decreasing, while in Oregon it is increasing. The climate and soil of Oregon seem to be wonderfully adapted to hop production and there is every reason to believe that the industry will continue to grow in Oregon. There is an increased acreage this year and there will be opportunity for a moderate increase again next year. The world's supply of hops is now short and barely sufficient to supply the consumptive demand, so that there will be no great carry-over stock. Under these circumstances the outlook for prices next year is very good and there is no doubt that hopgrowing will continue to be a profitable industry in this state.

WATERSHED OF COLUMBIA

Wheat, Grazing and Mining Country Watered by River's Great Tributaries.

STRETCHING southward from the Columbia River for the whole distance that it forms the northern boundary of the state east of the Cascade Mountains is a tier of counties which is given up mainly to graingrowing. They rise to a high plateau in the central part of Eastern Oregon and are drained by the Deschutes, John Day and Umatilla Rivers and several smaller streams which rise in the mountains in Crook, Wheeler and Grant Counties and in the main range of the Blue Mountains and flow northward into the Columbia.

Stockraising and horticulture take a secondary place among the industries of the counties immediately bordering on the Columbia. In the tier further south, in which the streams have their sources, stockraising is the main industry, with haygrowing as a tributary, except that in Grant County, mining rises to first place in the western spur of the Blue Mountains.

The main tributaries of the Columbia in this territory are being drawn upon for water for extensive irrigation enterprises and to furnish power for the mines and for the other nascent industries which will use the raw products.

LAND OF WHEAT FIELDS.

Sherman County, Which Was a Wilderness But Yesterday.

SHERMAN County comprises about 825 square miles of rolling prairie, advantageously situated between the Deschutes and John Day Rivers, and is one of the great grain-raising counties of the famous wheat belt of Eastern Oregon.

The soil consists, on the plateau land, of disintegrated volcanic ash containing all those properties essential for the growth of cereals. Along the river bottoms a rich sandy loam is to be found, which produces large crops of vegetables, fruit and alfalfa.

The climate is dry and bracing, with a moderate rainfall, sufficient for the growth of crops. There are no very marked extremes of heat or cold, and the dreaded cyclone and blizzard of the Middle West are unknown. The Winters are not severe, as stock of all kinds can be wintered out. During the Summer the heat is not oppressive, and the west wind blowing over the snow-capped Cascade Mountains insures cool nights, during which the most restless can sleep. There are no mosquitoes or other pests of that kind. In the Fall the weather is ideal—calm and bright. Malaria is unknown, and persons affected soon get well, while those suffering from pulmonary diseases find prompt relief.

Wheat the Staple Product.

Sherman County produces all the hardy crops—wheat, oats, rye, barley, etc., etc. Wheat, however, is the staple product, and to it Sherman County owes her prosperity. Last year, which was by no means a good season, there were 210,000 acres under wheat, the aggregate yield from which was 2,350,000 bushels, worth last October 70 cents per bushel, representing a total value of $1,645,000, a very fair income for a county that 12 or 15 years ago was an uncultivated and unfenced tract of waving bunch grass. The yield of wheat is steadily increasing, as new land is being brought under the plow, and better methods of farming resorted to.

Besides the cereals, potatoes and vegetables of every variety can be raised in abundance. Alfalfa thrives on the river bottoms, where three or four crops are taken off each season, and it has been proved that one or two crops can be raised without irrigation on the uplands.

Summer fallow is the best method of wheat farming. Many farmers find that it is a good plan to take off a Spring crop after Summer fallow, for they then get two crops in three years. The farms are large, seldom less than 320 acres and as large as 3000 acres, consequently farm operations are conducted on a large scale and with the most approved labor-saving machinery. During harvest labor is at a premium, farm hands getting from $2 to $5 per day. It is wonderful what a short time it takes a well-regulated outfit to harvest 1000 acres. Twenty-eight new combines, worth $2000 each, were bought by Sherman County farmers last season.

All Kinds of Livestock.

Horses, cattle, sheep and hogs all do well. Young stock runs at large on the Government range during open weather and are turned in to the straw stacks, left on the grain fields, when there happens to be snow on the ground.

Fowls of all kinds do remarkably well, and every farmer has his flock of chickens, turkeys, etc., etc., and finds a ready sale for his surplus.

Peaches, apples, cherries, plums, apricots and all fruits, except citrus, can be raised to perfection. There are some large orchards on the Columbia River that ship quantities of fruit East each year. Almost every farmer raises enough fruit for his own consumption and to spare.

Railroads in Two Directions.

The Columbia Southern Railroad traverses the length of the county from north to south, while the Oregon Railroad & Navigation Company's line forms the northern boundary. The longest haul by wagon from any point to either of these lines does not exceed ten miles and there is an excellent system of county roads.

Moro is the county seat, situated on the Columbia Southern Railroad about the center of the county. It has a population of 600 and is an up-to-date town in every sense of the word, with a sewer system, electric lights, waterworks, three churches, a fine courthouse free from debt. Grass Valley, ten miles south of Moro, is also up-to-date, with several brick buildings and a $10,000 brick schoolhouse. Wasco, about the same distance north of the county seat, rivals Moro in size, buildings and enterprise.

The county has six banks and the tax roll for 1902 amounted to nearly $40,000, all of which has been paid. The county is free from debt and every warrant is worth its face value.

Openings for Immigrants.

Men of large capital can find a wide field for operations. There are manufactures, and the water power on the John Day and Deschutes is going to waste. Men of small capital cannot do better than buy a wheat farm. Prices of land are ridiculously low, good land going at from $10 to $20 an acre, land just as good as that of older counties sells for $40 to $50. Farmers that have purchased land in this county have mostly done well, and we challenge any locality of equal size in the United States for as many men who carry check books, with money behind them in the bank, as our Sherman County wheatraisers. Labor of all kinds finds a fair remuneration and farm hands are at a premium during harvest. Women and girls to do housework can scarcely be found at all and can earn from $4 to $4.50 per week.

M. FITZMAURICE.

Moro, Dec. 16.

NO MORE A "COW COUNTY."

Gilliam Ranks Among Wheat-Producers, but Needs a Railroad.

BEST in point of general progress has been the year just passed in Gilliam County. While other seasons may have produced heavier yields of cereals per acre and the number of sheep and cattle on the ranges is gradually diminishing, the county has never before moved forward with such speed as it has during 1903.

Gilliam can no longer be numbered among the "cow counties." It has passed through that stage of its development from a primeval to a productive community and taken its place among the big wheat-producing counties of the Inland Empire. From one and one-half million to two million bushels is now our average annual crop and the land has only been tickled—merely scratched. The soil and climate are here to more than quadruple the present yield when the latent resources are once fully developed.

Growth of Condon.

A good index to the progress of the county is to be found in the phenomenal growth of Condon, the county-seat town, during the past Summer. Since April the town has easily doubled in population and business. A handsome