

WILLAMETTE FARMER

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THE PACIFIC NORTHWEST.

The Wonderful Material Wealth of Oregon and Washington—Conformation of the Country—The Fertile Willamette Valley—The Forest Growth of Washington Territory, Etc., Etc.

Correspondent Springfield Republican.

WALLA WALLA, W. T., Nov. 5, 1882.

The two great natural sources of wealth upon which the civilization and prosperous development of the Pacific Northwest are to be based are its rich agricultural lands and its vast forests, full of valuable timber. The open country that lies between the mountain ranges, and naturally first attracts settlers, varies widely in degree of fertility. The best of it is believed to equal in productiveness any agricultural land on the continent, and the great body of it is susceptible of profitable cultivation. It is peculiarly adapted, from the nature of its constituents, to wheat growing, and that is now and will be for years to come, if not always, the leading industry of the country. The forests cover the mountains and in parts of the country, particularly in Western and Central Washington, sweep down on to and over the lower lands in dense masses. The Cascade mountains, a prolongation of the Sierra Nevada chain of California, extend north through Oregon and Washington at an average distance of 110 miles from the ocean, cutting the country into two grand divisions, which are, in most respects, totally unlike. The Columbia river, flowing south by a winding course into Eastern Washington from its first sources into British Columbia, turns sharply to the west, 200 miles below the boundary line, and rolls on its way in majestic power toward the Pacific, cleaving the Cascade range in twain and forming the boundary between Washington and Oregon. There are thus two great natural divisional lines through the country, crossing each other at right angles.

On the western side of the Cascade mountains, the valley of the Willamette river, in Oregon, is the most inviting agricultural section, and was the first part of the country to be populated. It is sometimes called the Eden of Oregon, so generously does it yield increase to the husbandman and so beautiful are its natural resources. It is about 125 miles in length, Portland lying at its northern end and Eugene City at its southern, and has an average width of 40 miles. The Coast range of mountains separates it from the sea, but its climate is influenced by the soft, damp west winds that blow from the ocean and the warm currents of the Pacific that sweep up against this northwest coast. The winter is a prolonged rainy season, during which the average and pretty even temperature is about 38 degrees. The summer is comparatively dry, but cool. The nights, even in midsummer, would be called "cold in Massachusetts," and the average summer temperature does not exceed 67 degrees. The valley is well watered by a great number of tributary streams, which flow into the Willamette from the Cascade mountains on the east and the Coast range on the west. The character of the land is especially on the lower levels, is prairie, but the prairies are intersected or separated one from another, by wide timber belts and the foothills of both mountain ranges are generally wooded. The prairies make the most beautiful and fertile farms imaginable and the timber lands wherever stripped of their trees and planted are found almost equally productive. The soil is a dark, deep loam containing a large amount of vegetable mold and resting on a clay subsoil. In the bottom lands near the streams there are rich deposits of alluvium. All the cereals are raised in the valley with the exception of Indian corn, for which the summer nights are too cold. Wheat develops to perfection, and the berry of the Willamette valley wheat is widely famous for its full, plump form, and produces flour of exceeding whiteness which is highly rated in the Liverpool market. The seed is commonly planted in the fall and the yield per acre ranges from 20 to 30 bushels, with an occasional harvest running up to 40. There are farms in the valley where wheat has been raised on the same land for 40 years continuously without the least bit of fertilization, which are still producing 20 bushels to the acre. Hop-growing is an important interest and has been very profitable this season. Most of the fruits and vegetables are raised with marked success, though the more delicate varieties do better east of the mountains. Apples, prunes, plums and cherries attain a rare degree of perfection, but grapes and peaches are raised only with careful attention. As the Willamette valley has now been settled for over 40 years, and, so far as population is concerned, has constituted about all there was of Oregon until recently, the prairie lands are practically all taken up, and the

arms are held at from \$20 up to \$100 per acre. There are still, however, considerable tracts of timber land, the property of the Oregon and California Railroad Company, which are offered at low rates, and will make excellent farms when cleared. The consumption of wood in the country is now so large that it would seem as if the trees must of themselves more than pay the cost of clearing. The business of farming is so comparatively easy in the valley that the farmers drift into careless and wasteful methods and lose a large proportion of the revenue that they might otherwise save. Indeed, they exhibit a surprising lack of that valuable New England virtue, thrift. Scattered along the river between Portland and Eugene are frequent prosperous towns and villages, of which the most important are Oregon City and Salem. The latter is the capital of the State and is a place of 4,000 or 5,000 population, slow and at any, but rich as an agricultural center should be and well furnished with good public buildings, including a handsome State House. Oregon City is isolated by a fall in the Willamette river, enjoys an excellent natural water power, and is the chief manufacturing center of the State, besides being the oldest town in the country. Its interests are mainly flour and woolen goods.

South of the Willamette valley and west of the mountains are two other principal valleys, the Umpqua and the Rogue, whose rivers, fed by numerous tributaries, flow westward through the coast mountains into the Pacific. Although not so remarkably fertile as the Willamette valley, they contain much excellent agricultural land, and are yet but sparsely settled. It is thought by those familiar with the country that these southern valleys are to become largely devoted to the culture of the grape, to which their climate is better adapted than that of the northern counties of the state.

West of the mountains in Washington Territory, and stretching from them to the ocean is the heaviest belt of timber to be found anywhere in the United States, and the finest body of coniferous trees in the world. The whole surface of the country, with the exception of two or three valleys of limited area, from the mountains to the Pacific and Puget Sound, is densely covered with a strong, vigorous growth of fir, pine, cedar, spruce, larch and hemlock, with some alder and cottonwood interspersed. This belt is 200 miles long, from the Columbia river to British Columbia, and 100 miles wide, except in its northern part, where Puget Sound enters into it, reducing the width to 30 or 40 miles. The forests also extend over the Cascade mountains and somewhat down their eastern slope, as well as south along the range into Oregon, but in much diminished density. In Oregon there is considerable good ash and maple. A large proportion of the belt in western Washington will yield over 50,000 feet of lumber to the acre, and more of it will produce 25,000. The fir-trees which constitute about seven-eighths of the whole growth, attain a remarkable height, and are marvelously straight and symmetrical in form. It is not at all uncommon to find them fully 250 feet high, and indeed all the various trees that grow in this section appear in the perfection of form and size. They generally stand amid a thick undergrowth of brush, ferns and mosses of wonderful beauty and variety, so that a ride through the forest by rail, is full of charming interest. The value of a vast tract of timber such as this and the immense quantity of lumber that it will yield, are simply incalculable. It is a mine of wealth to the Pacific coast, which if wisely husbanded, will be practically inexhaustible. There are now some 15 or 20 saw mills scattered around the shores of Puget Sound, the product of which is shipped to California, the Sandwich Islands, Australia and South America, and even to England, France, China and Japan. Whenever the timber lands are cleared crops can be raised successfully, and there is already a large export of hops from the country adjacent to the southern part of the sound, some of the growers having netted as high as \$100 per acre this year, of course an exceptional season.

East of the Cascade mountains is the great basin of the Columbia river, a region 150 miles broad by 500 long, embracing the valleys of the parent river and its tributaries, which is yet only beginning to be opened to civilization. It was penetrated first by the gold hunters, but did not prove rich enough in the precious metal to satisfy their impatient expectations, and few of them are left to mark the places where the digging and washing for the glittering prize were once so actively conducted. East of this region in the Idaho mountains the mining interest has been more profitable and permanent. Following the miners came the cattle-breeders, horse-breeders and sheep-raisers, who have been more successful, and whose interests have now become large and

important. The country in its natural state affords abundant pasturage of such excellent quality that the Oregon cattle and horses are noted for their large size and superior strength. But only within recent years has it been discovered that the Columbia basin contains thousands upon thousands of acres of the best agricultural lands, and is substantially all arable if the soil is properly treated.

The general character of the country does not at once impress the traveler as offering special attractions to the farmer. It is very unlike the Red River valley of Dakota, for instance, and far less propitious to the eye either of the tourist or the prospecting settler. There are broad expanses of the desolate sagebrush land running through it, particularly along the beds of the larger rivers, land that can only be tilled successfully with irrigation. On the eastern side of the range are the Coast Range and Blue mountains, the latter an extensive range whose numerous spurs project themselves in various directions through Eastern Oregon and into Washington Territory. But for the most part the basin is an open country traversed by numberless streams, from which the land rises into rolling plains, sprinkled over sometimes with a thin growth of pine. It is a singular fact that the best lands for farms are found on the higher levels away from the great rivers. The most fertile region that has yet been opened by the railroads lies in the southeastern corner of Washington, but spreading east into Idaho and south into Oregon. It embraces what is known as the Walla Walla country and the Palouse district, named from the river that waters it, and it now produces large crops of wheat for export. Further north, on the opposite side of the Northern Pacific Railroad line, is another body of very promising agricultural land called the Spokane country, and there are other at present less known but perhaps equally fertile districts, scattered about through the great basin.

The soil of the best lands in this Upper Country is a dark loam, composed of alluvial deposits and decomposed lava, resting on a clay subsoil, underneath which, at considerable depth, lies a basaltic formation. The bunch grass which grows on it is strong and exceedingly nutritious, and wheat planted after the surface has been once turned to a slight depth and lain fallow for a few months, thrives wonderfully. Even heavier crops are harvested here than in the Willamette Valley, and the average production per acre is safely placed at twenty two bushels. This year there has been a partial failure of crops owing to the protracted drought, and partly also, no doubt, to a lack of knowledge among the farmers of the safest methods to be followed in planting. Farming is, in fact, still in an experimental stage in this part of the country, and it seems to be an open question whether wheat should be sown in the fall or spring. The other cereals, except corn, grow almost or quite as well as wheat, and fruits and vegetables of mammoth size and excellent flavor are raised in great abundance. The orchards develop rapidly and produce astonishing results.

The climate on the eastern side of the mountains is characterized by a long, dry summer and a short, rather sharp winter. The total annual rainfall does not average over 20 inches and comes mainly in the spring which opens as early as February. From June to September there is no rain and the summer weather is warm, the temperature 80 deg. to 90 deg. But the nights are cool and the west winds from the ocean surcharged with vapor, which sweep up through the valley of the Columbia, temper the severity of the drought and protect vegetation from its injurious effects. The same wind, called the Chinook, mitigates the cold of winter and melts the snows rapidly. It penetrates as far east as the mountains of Montana, and is a welcome friend to the cattle and their owners. The autumn is a delightful season of moderate temperature and generally clear skies. Winter hardly begins before Christmas and is over in two months, the mercury sometimes dropping below zero, but ordinarily not under 30 deg.

The country is an inviting one to settlers; they are already coming to it in great numbers, notwithstanding the expensive and hard journey involved in getting here, and they will flock in still more rapidly when the Northern Pacific railroad is open. The railroad is fast pushing its way through the rich districts, new towns are springing up along its lines, and there is a universal spirit and growth taking possession of the country. The railroad and improvement companies are seeking to get from \$5 to \$12 per acre for their first-class lands, but, of course, sell the less desirable at lower prices, \$3, \$4 or \$5 an acre. In Eastern and Southern Oregon and Northern Washington, there is a great deal of

good farming land scattered over the country still wholly unpopulated, or utilized only for grazing, that the Willard railroads will gradually open to cultivation and settlement. But there are also immense tracts of land of poorer grade in the Columbia basin, grown over with thin but nutritious grasses or sage brush, that will long remain unoccupied, except for the cattle ranges, simply because there is much superior land to be taken up first. In the more protected valleys of Oregon sheep thrive remarkably, and the wool interest is already a heavy and profitable one, as appears from the large exports during the past year, amounting to 7,500,000 pounds. Of the five leading exports of the State, wool is the third. The others in their order are wheat and flour, salmon, oats and lumber.

OUR BOOK TABLE.

Harper's Monthly for January commences with an article about Holland giving a chatty, rollicksome sort of tale of a stroll through that land of dikes and cleanliness. No nation on earth can boast of women who clean and scrub so faithfully and continuously as do these Holland trows.

The Redwood logging camp lies in the forests of our own Pacific slope and is wonderfully true in picture and details, even to the representation of "our cook," the inevitable Chinese boy in blouse and sandals.

"Living Lamps" is a charming bit of natural history put into words that read like a fairy tale. The article treats of all animals that give a phosphorescent light, of whom our own little glow worm is a notable representation.

There are stories, and a Christmas tale, too, while "Shandon Bells" continues on in its own quaint style, peculiar to William Black, who is one of the few great writers who are coming up to take the place of Dickens, Thackeray and other story writers.

Harper's Young People is the very best magazine that comes to our table for young people. The four publications of Harper should always go together, and if all are taken at once, the reduction of such club rates make it easy to pay for them.

The Harper's Monthly, Weekly Bazar and Young People give all the variety of reading that is needed in a large family. The Bazar is the most reliable of any fashion sheet, while the styles and designs are such as would come under the means of people in medium circumstances.

The Young People always has some good story reading, while the rest of the matter is all calculated to elevate and educate the young mind. The pictures are most exquisitely done, showing that no pains are spared to make it a first-class journal, as is all that is issued from "Harper's."

The Century commences the new year, if possible, with greater attractions than usual. No other magazine can claim a class of contributors of greater strength and reputation as made the old name of "Scribner." This magazine won for itself a wonderful circulation; was it by hard work and faithful literary labor. Through one Administration is worth the whole subscription. Then the cuts and illustrations are the best and finest known in art. The library table should not be without the Century, and the St. Nicholas for the young portion of the family. No other magazine has attained greater popularity in the United States than the old Scribner and the new Century.

The Young Scientist is a good-sized magazine, of some forty pages, devoted to a sort of exposition of home arts. The first article shows, by picture, the appearance of blood corpuscles of animals, and explains, in a readable manner, the formation of blood and its way of circulating. The handling of tools come next; working of metals is talked of. Then there is a girl's department, with its accompanying domestic hints. Altogether it is a very useful, interesting and necessary book, published at 49 Maiden Lane, New York.

FOX VALLEY, Or., Nov. 30th, 1882.

Editor Willamette Farmer:
There are as many as thirty families in this neighborhood, and about one-third of which take no reading matter whatever they say they are too poor, but they spend more money for tobacco and whiskey than would furnish them all the reading matter necessary. The brutal appetite must be fed while the mental faculties must perish.

Mr. Editor—Since the game law came in force, the hunters up here think the law is all bosh; that they cannot enforce it. The man that would report them would place himself in jeopardy. Hunting and shooting deer is still going on.

A. D. GARDNER.

NEWBERG, Or., Dec. 25th, 1882.

Editor Willamette Farmer:
Is our common laundry starch made from potatoes? It is my understanding that it is, but some people tell me it is made from corn. If it is made from potatoes, people generally should know it and hold out inducements for some one to put up a starch factory. Potatoes could and would be raised in large quantities in this country, if farmers could be assured they would get a remunerative price for them.

D. J. WOOD.

NOTE.—Friend Peterson, of East Portland, makes beautiful starch from his potatoes, which is excellent for many purposes.
Make your old things look like new by using the Diamond Dye, and you will be happy. Any of the fashionable colors for 10c.

HOP GROWING vs. PROFIT.

BUTTEVILLE, Or., Dec. 27th, 1882.

Editor Willamette Farmer:

Mr. Wells thinks that one pole to the hill would not do on the richest bottom lands. Last fall R. C. Geer tested a piece of his rich land, one pole to the hill, seven feet apart, and the yield was at the rate of 4,500 pounds per acre. In planting a hop yard, it is advisable to look to the supply of poles. Already here some are having little trouble to find poles. A trouble that will increase with every year's picking begins after the seeds have turned to a dark color. Some pick in what we call hoppers, being a frame about eight feet long, two feet wide and two feet high. Let the side poles of the frame run over sixteen inches for handles, and tack Cadot A. muslin on, so as to make a kind of basket the whole length. Two or three pickers to a hopper. Measure in boxes and take to the dry house in boxes, or empty in sacks. Make three sacks out of two wool sacks, and they will hold one box apiece, which makes it easier handling them. The boxes used here are mostly made in Portland of spruce, planed inside and out, cost one dollar apiece in Portland, and single boxes of the following dimensions: Eighteen by thirty-six inches and thirty inches deep, holding about twelve pounds of dried hops. Some pick in the boxes. They will settle to hold up to one pound more by so doing. The average price for picking here is 40 cents per box. The picking season will last in a year, that is not too dry about three weeks. A dry fall, like the present one, ripens the hops very fast. Three boxes is an average day's work. For a cheap dry house, cut logs, so as to make the house 20 by 24 feet on the inside. Set it in a hillside if you can. Make it 16 feet on the ground to eaves and 12 feet from ground to eaves. Let a set of planks run out, so as to make a store room, on one end out of plank, about 24 feet long. To get the room stored in an economical manner, carry your hops on an elevated walk that should run the full length of store room. Make a light scap for the purpose out of cedar, if you have it, that will hold about five bushels. Make a walk to carry green hops up to a door in the end of dry house. Put in joint-two feet apart up and for dry floor strips, about one inch by one and one-fourth, edge up to make them strong, and saw up house lining, and stretch tight, and tack on outside. Make store room about seven feet from ground to floor. Two common box stoves, about 38 inches long, with pipe running direct through the room, or a 45-inch stove with pipe running around the room, will make the heat. For safety, build flues of brick in the end of building, letting them go up through drying room. Make plenty of ventilation below, and a ventilator on top of dry house to allow steam to escape. I have seen the whole door left open for ventilations below. It is a good idea if it can be ventilated from both ends of the building, as it will better equalize the heat. Heat up to about 170 degrees. Hang the thermometer near the top of the room, as it is hottest near the top. If the room gets too hot, make more ventilation, as (with the required heat) the more air that enters the faster it will dry, or in other words, the more hot air you can send through the hops the faster you can dry. Of course, the house must be chinked and daubed from ground to roof. Daub it from the inside below the drying floor. A house of the same size may be made of plank, one inch thick, and doubled. Use plank no wider than eight inches. A house of that size, with two stoves and good wood, will dry about 1,200 pounds a day. Hops are here often put on two feet deep on the floor, and the first heat is killed. I have seen them grubbed, after the hops are four inches high, without any damage to the hills. In picking I cut the vines about five feet from the ground. Some do not cut the vines at all, preferring to cut or break down the poles, for fear of injuring the hills. I think that will be stopped when the pole gets more scarce. I have lost few hills by my plan. Where poles are scarce they may be cut quite large, as large as three and a half or four inches at the butt end, and may often be got off of a larger tree by taking the pole out of the top of the tree. If a pole is very large it may be some shorter. No hop sets can be obtained around here. They may be had at the Sound. I heard to-day that the party that had contracted for a few hundred thousands from the sound was a little "off" in his arrangements. He was to get them for \$3.50 per M, but received a letter that he would have to pay \$6 per M. As he had been contracting right and left for \$5 per M, it would leave him behind. I hear that he had gone to the Sound to see about it. I suppose that the Wells hop could be obtained of Mr. Wells, or of others, in his vicinity. The San Francisco Bulletin says that growers claim they will sell all the hops they can obtain this year, and even the Indians have the fever and are going into the business. Two Chinamen have year here. I cannot give plan for a press as I have been requested to do. It would be too complicated a job. Better see some press for yourself, or see some man that can make one. I have endeavored to answer the question of all correspondents in the last two articles. One thing more if you go into the hop business you should take the Willamette Farmer, and the Waterville Times, published in Waterville, N.Y.

at \$1.50 per year. The Times is the best hop paper in the United States. Everybody wants a hop yard. In two or three years when hops are selling at six cents in San Francisco, they will wonder what they went into hop raising for your remarks, Mr. Editor, on the subject are to the point; and some, probably, will find to their cost that it is no all profit in that branch of farming as well as some others.

JOEL P. GERR.

Farm Prospects in the Willamette Valley.

POLK COUNTY, Or., Dec. 23d, 1882.

Editor Willamette Farmer:

As this is a time of rest and recreation for the farmers of Oregon, permit us to write a few lines on the prospects generally. The fall season for seeding has been very favorable, and the farmers generally have taken advantage of the opportunity to put all the grain in they could. But strange to say there has been but little ploughing done for summer-fallow. The farmers seem to differ greatly, as to the best time for ploughing, most of them appear to believe that spring ploughing is the best time, inasmuch as they have the use of the stubble for pasture, while others think that summer-fallowing is being done only for the purpose of cleaning the ground, and therefore the earlier the ground is plowed the better, because more wild oats and weeds will come up on fall plowed ground than after spring ploughing. We wish that some experienced and judicious farmer would give us his views in regard to this matter in the FARMER.

Another question: we would like to see answered in the FARMER, namely, what is the cause that grain sown in the valley, or on low lands, grows much more rapid or rank in the winter, than that sown at the same time on uplands or hills? While at harvest the grain on the hills is often the roughest, will some one answer that? Grain at this time looks fine, and is very rank, caused by the warm rain we had lately, and will be fine for sheep and secure a good crop of wool by spring. This warm, open weather which makes the grass even to green is a great relief to many farmers, as they seemed to be short of rough feed. We understand there is a course of lectures to be delivered at Oak Grove for the benefit of the M. E. Church, lately built. At that place, we see that Hon. M. P. Deady is to speak on "Trial by Jury," on Jan. 12th, at 6:30 p. m. We think he is sure to have the house full. A good smith would find an splendid location at Oak Grove for plenty of work and good, able people to pay. We understand the post office at Crowley's Station is to be discontinued; cause, no postmaster. G. H. EILEN.

HOW IT PAYS TO TAKE THE "FARMER."

PORTLAND, Oregon, Dec. 29th, 1882.

Editor Willamette Farmer:

I feel greatly interested in the success of your paper, for at least two reasons: 1st—On account of the honest efforts of its editor and managers to make it a really good farmer's paper. I should like to see such efforts rewarded.

2d—Because Oregon and the Northwest need, and must have, a good agricultural paper, and the sooner the better, and the sooner or better than by sustaining one already in the field under a good management.

Now, Mr. Editor, I am not a farmer, and I am only a new-comer to the Northwest, and I do not know that I ought to speak at all, but I like this country. It is a land of great promise for the future, and I mean to make it my home; nay, more, I mean to be a farmer here, and I want to indicate the fact that I am interested in it. Mr. Knapp is right when he says it pays to take and read the FARMER; but I think he fails to impress this truth fully that it pays better to take the FARMER than it possibly can pay to take the best agricultural papers in the East—even if they had the Eastern papers free. What if it does look a great deal of what they have, for my part I am glad of it in some respects. "All is not gold that glitters," and I've found that after time has washed out the "pay dirt," if there is any "gold" in what these Eastern papers turn up, our FARMER is pretty sure to show it up. But the FARMER is our pioneer and guide into this new country; and what good is all their fine haired theories and delightful subtleties of scientific land-survey, if we have no guide to assist us to a knowledge of the ground principles of our adaptability. We should take the FARMER, not because it may pay better by and by if we support it now, but because it will pay and does pay to take it now. G. A. S.

The friendly writer of the above puts the question exactly as we have often felt it, and we thank him for his kind word, coupled as it is with good sound sense. As to the value of our paper, it reflects the time in which we live, and the circumstances that surround us. Its editor looks over, and our shared correspondent says, calls the best matter found in the great agricultural journals of the East, most of which we receive. These contain very little of practical use to an Oregon farmer. The editor meets and converses with a great many practical farmers, and gathers information of their successful methods. This he gives to his readers. The FARMER is open, and gladly receives communications from all farmers in the Pacific Northwest, and affords a means of communication between farmers here. In this manner we practically cover all the ground desirable for a farm paper. As our friend intimates: The great Eastern journals are not adapted to this region. They refer to circumstances and conditions we do not have, and therefore they are useless for practical results. The FARMER strives to reach the home situation, and does so with reasonable success.