



WILLAMETTE FARMER PUBLISHING CO. TERMS OF SUBSCRIPTION. One year, (Postage paid) in advance, \$2.50...

PUBLISHER'S ANNOUNCEMENT. The following are authorized to receipt for subscriptions...

turnips, that are making a fine growth on the same dry upland. He seems to be accomplishing much good by his practical experiments.

Another experiment he has made may rival in importance the culture of alfalfa. He says he procured and planted a small quantity of the seeds of the Egyptian or Arabian perennial millet, which came up, and is heading out heavily 3 1/2 or 4 feet high, and will make heavy fodder. It has a dozen stalks for every seed, and new ones sprout up a foot from the main stem.

He also procured from San Francisco a piece of the root of the same grass, which is jointed. He cut it up in as many pieces as there were joints and set them out. They grew finely, and are doing almost as well as the seed that was planted much earlier. This also seems a valuable experiment, for the perennial millet when once in possession holds its own remarkably. We shall wait the further result of Mr. Hill's experiments with interest.

Below Mr. Hill's place, in the valley of Mill creek, is the place of Mr. Charles Adams, once a resident of Salem. Mr. Adams has much fruit. There are many patches of strawberries and a world of blackberry vines all loaded with fruit. He has also thousands of fruit trees planted only 9 feet apart; plums, prunes and peaches are in majority, but seem not to have borne well, probably from frost. His trees and vines are all watered by a ditch from the creek above, and his place should prove profitable. The temptation to plant trees in creek bottoms is great, but we believe the hillsides, up sufficiently to be clear of frost, would pay better. Mill creek is famous for orchards, but they are all in the bottoms when they ought to be on the hills. In Dallas City the garden orchards are all loaded with fruit of all kinds, especially pears and peaches. The vapor from the broad river tempers the coldest atmosphere and prevents injury from frost.

In town, back of the old brewery, there is a successful experiment of growing alfalfa in sand that has drifted there. It has been watered by hose, and has made a wonderful growth.

PILOTAGE AND TOWAGE.

The farmers of Oregon are interested in whatever relates to commerce. Every unreasonable tax on commerce is a tax on producers more than on merchants. The coming session of the Legislature should see a good law passed for regulation of pilotage and towage, and the farmers in the Legislature should see to it that this measure, or some other measure that shall meet the case, shall pass. We have reason to believe the bill prepared will be in the true interest both of commerce and producers.

We publish elsewhere a letter received by Donald Maclay, Esq., from a gentleman in England, who talks plainly of the estimation our commercial interests maintain abroad. While we have never flattered the pride of Portland much, we take pleasure in giving the merchants of this city credit for making a move in the right direction, that shows a public spirit we appreciate. They have organized a tug boat company, with a large paid up capital, and now have a first class tug on the way out that was purchased at Philadelphia. They will meet with determined opposition from Capt. Flavel, who has controlled the pilotage and towage of the Columbia long enough to become very wealthy. It is certain that we shall have safer towage and also cheaper. This enterprise of these Portland merchants looks to the general good and cannot be questioned. We may expect to see our commerce better protected and also more reasonably conducted. It remains for the next Legislature to do its part by a thorough revision of the law regulating pilotage and towage.

EX SENATOR MITCHELL is evidently intending to make all the fight that is in him—and there is a great deal of rough and tumble political "scrimmage" in him—to go back to Washington as U. S. Senator from Oregon. When he was our Senator he appeared as the indefatigable defender of the Central and Union Pacific roads, and in their interest, denounced the Thurman bill as unconstitutional, which only had for its object to require these companies to do something towards securing the Government for the millions loaned to build their roads. The Supreme Court did not agree with Senator Mitchell, fortunately, but his record on that matter is very plain. Mr. Mitchell has a way of driving his party to his support. He was the political "boss" of Oregon Republicans a long time, but the day of "bossism" is waning in other States, and we wait to see, now that Republicans again have power here, whether the Mitchell ring can control the next Legislature. The FARMER has not often meddled with politics, but our position towards Senator Mitchell has been plainly taken, for years back, and remains unchanged. Mr. Mitchell has changed his tactics perhaps, but we cannot forget his fierce advocacy of the worst monopoly in existence, or be willing to trust him as our Senator. As to his change of base, our Senator should possess consistency to command respect both here and in Washington. The man who once won his way to the Senate by harrying offices for votes will be sure to repeat the experiment. Those who favor civil service reform will see how foreign to it must be any man whose success is based on the abuse of patronage. Because we oppose corruption in politics we shall regret to see any man succeed whose career in politics has been a "boss" of the machine. The professional politician of any party is a corruptor of public morals, and in enmity with true government by the people.

Information Wanted.

ALPHA, Spokane Co., W. T., Aug. 1. Editor Willamette Farmer: I address you to know if you can give me the whereabouts and P. O. address of Mr. Jonathan Bogarth. If you or any of your readers can, it will oblige me very much by doing so. I was told his name appeared in your paper as a member of a grange lodge. Respectfully yours, JOHN BOGARTH.

HARVEST TIME IN THE UPPER COUNTRY.

WHAT WAS DONE IN A DRY SEASON—EASTERN WASHINGTON AT ITS WORST.

Forty Bushels Wheat per Acre in a Dry Year—Seventy-Five Bushels of Oats per Acre Without Rainfall—A Half Crop in Spokane Equal to a Full Crop in Minnesota.

Having recently returned from an extended trip in Eastern Washington, and to the front of work in Montana, on the Northern Pacific railroad, we can give some definite idea to our readers of the general progress that is being made in the region east of the Cascades, and of the appearance of that region under the least favorable circumstances that have ever been known.

The past season—or rather the present season—has been the worst ever known for drought. Of course it cannot promise as much in such a year as in ordinary ones, when all conditions favor large yield of crops. The true part of a historian is to deal with facts, so in writing up the interior portion of the Pacific Northwest we must take things as they are and give a plain statement of matters as we found them.

After viewing the country east of the Cascades, and making the conclusions that naturally suggest themselves, we realize that it is a region of wonderful fertility, which even a season of severe drought cannot seriously depress. It is a matter of doubt if any other country can present as favorable an aspect under the same disadvantages. We shall narrate facts and leave the reader to draw his own conclusions.

During the spring we visited the different sections of Eastern Washington Territory at the time when farmers were putting in their crops. Through the country south of Snake river there was more or less winter wheat, especially in the vicinity of Walla Walla. The seasons are considerably earlier in that section than even thirty miles to the north, and east of there, so that they were sowing wheat about Dayton, and beyond there, from two to four weeks later than around Walla Walla. Crossing Snake river we found the farmers of the Palouse region still later with their work. South of Snake river they aim to get their spring crop in in the month of April, while to the northward of Snake river in the region extending one hundred miles north to the Spokane river, farmers were plowing and sowing grain on old land—stubble—all through May and even through the first week in June. Very little land is sowed or planted on seed the same year it is broken. When we questioned whether they could depend on sure returns from such late planting, the answer always was that "they would not thank any one to insure them less than forty bushels of wheat to the acre on ground sown by the first, and even to the tenth of June in some cases."

We noticed, too, that in the Palouse country and north of the N. P. R. R. in the Spokane country, no winter wheat had been sown. The seeming certainty of good, and even of extraordinary returns, from spring sowing, placed against the other fact that winter wheat had in some instances frozen out, made the farmers of the greater portion of Eastern Washington too confident. They had had dry seasons, but had known no failure of crops. It was shown to us by Mr. Matlock, at Palouse Bridge, that wheat had matured well and made very heavy returns, where no rain had fallen to thoroughly wet the soil from the time of planting to harvest. So they sowed all through May with perfect confidence they would reap in due season, and so they are reaping, but the crops are lighter than they expected, ranking only at one half to two-thirds of what is an average yield in favorable seasons. That is to say, instead of having 30 to 50 bushels of wheat, their harvest only ranges from 15 to 20 bushels to the acre.

To be plain and specific, the year 1882 has been the worst season for crops ever known on this line of the Northern Pacific road, and in all Eastern Washington and Oregon. We accept the situation, then, that this is a year exceptional in its character. There has been no effective rain fall through all that region for three months, though light showers have gone over parts of it. Every where we found good gardens, and fruit trees planted the past spring have made a good growth. Corn has done exceptionally well, for it has been a good season for corn, the best ever known. At the land office of the N. P. R. Co., at Cheney, we gathered interesting facts, represented by specimens gathered from the present year's crops in that vicinity, and on exhibit there, bearing respectively the history we give below.

Mr. Ainsley, near Medical Lake, in the Deep Creek section, sowed Russian oats June 1st, and harvested them August 14th. The average height is 5 feet, and will yield at the rate of 75 bushels per acre. There was actually no rain-fall from the time of planting to reaping these oats.

There is also, exhibited by Ainsley, some hull less oats, grown by him this season, without any shell, that he says will go 40 bushels per acre; sown May 15, harvested August 15, on which not over one-fourth of an inch of rain has fallen since planting.

At the same office is a sample of Red French wheat, grown by M. N. Knight, near Rock creek P. O., that was sown September 15, 1881, and harvested July 23, 1882, very excellent heads. It was not measured, but will average 35 to 40 bushels to the acre of good merchantable grain.

Ritzville is the first point on the N. P. R. R. that is considered to be arable land inviting settlement. From there the land office shows sample of Snowflake wheat, sown April 12th, by J. G. Bennett, who also shows a bunch of well filled oats sown this season in same locality. They also have specimens of grasses grown

this season in different parts of the Spokan region of country; orchard grass grown on hill land is four feet high; Kentucky blue grass three and a half feet high was grown in Cheney; all cultivated grasses do well in this part of the country, as we learned from Mr. John Roberts, Waverly P. O., Spokane county, who is County Commissioner and a man of excellent standing. The land office shows good clover that was grown on high rolling land near Rosalia, south of Cheney. They have buckwheat three feet high, also alfalfa three feet high, that was sowed last spring by Lefevre, of Medical Lake, who also shows well matured corn that was planted May 4th and was ripe August 11th, that grew eight feet high. Mr. Roberts came here five years ago. He is well informed from personal experience and from information derived from older settlers. He says this has been the driest hot-est season he has known; during five years of his residence there has been no dry season that has injured crops. The oldest residents say that in eight years they have only had one season when they could make a complaint of drought, and that was not nearly so prolonged as it has been this year. All accounts agree that this has been a year especially unfavorable for spring sown grain.

Mr. Roberts lived for a time near Walla Walla, and previous to that was for a long time a resident and practical farmer in the Willamette Valley. His official position shows that he commands the respect of this community and his experience is reliable. Last year (1881), he had a threshing outfit in the field, and says that with the cultivation natural to the beginning of agricultural development in so new a country, the threshing of last year showed an average that wheat put in in the spring on stubble land gave from 37 to 43 bushels to the acre, and that oats went from 50 to 75 bushels. The present year has been less favorable for wheat and oats, but is usually good for barley and corn, which do best in dry, warm seasons.

Corn grows well in the vicinity of Walla Walla without any rainfall, owing to the natural tendency of the soil to retain moisture. The only trouble is to get the varieties usually cultivated at the East to ripen in a region, where they have such cool nights all summer. The dew of the Upper Country are so heavy that they refresh the crops, while the sandy loam, often drier, is inclined to retain moisture. In the garden of J. W. Fange, Esq., at Cheney, we saw good results from vegetables planted late and never rained on or irrigated. Fruit trees have made good growth that were set out this spring, and Catalpa seeds planted June 1st, have come up without rain, and have grown well. In the gravelly lands at Spokane Falls, we saw, in Mr. A. M. Cannon's garden, corn, potatoes, cucumbers, melons, tomatoes and other vegetables, that had ripened and yielded well without rainfall or irrigation. He also had a field of oats that yielded well.

By the kindness of Mr. Cannon, we visited the Pease Prairie, nine miles north of Spokane, and close under the Couer d'Alene Mountains, which is a beautiful farming district, with deep, rich soil and rolling surface. This valley claims an average of 25 bushels to the acre for 1882. This, too, for grain, which has not had half an inch of rainfall since it was put in the ground. Last year five farmers on Pease Prairie had 50 bushels of wheat to the acre. That was for spring sown grain. From Moran Prairie, a fine agricultural district south of Spokane Falls, in some instances, they report a full crop of wheat the present year.

Summing up the agricultural prospects of Eastern Washington, the present year, we find that winter wheat, well put in, makes on an average a large yield, and that spring grain, under most disadvantages ever known, gives 15 to 30 bushels to the acre. The gardens are good and corn is excellent. Good cultivation, and sowing of fall wheat, would place the farmers of all this region above any chance for disaster.

Mr. Roberts, of Spokane county, alluded to above, asserts, as the result of his experience in Oregon and Washington, that Spokane county will produce one year with another, one-third more grain than the Willamette valley ever could in its best days. He considers that region equal to the country south of Snake river, and east of Walla Walla. As to the best variety of wheat to sow in the fall, to stand the winter, he says the little club winters well and doesn't shatter. He says all wheat sown last fall has done well this year, and will yield 35 to 40 bushels to the acre, which confirms our own impression that the farmer here can insure himself against drought by sowing fall grain. We saw many fields of oats, not yet ripe, that look well. Comparing that region, and its crops this year, with the Willamette valley, it seems certain that under similar conditions crops there are much better than they would be in the Willamette sown at the same time, and having no rainfall to develop them.

In conclusion: It is a fair question to doubt whether there is any part of the United States where crops, without a drop of rain in some instances, and with such small amount of moisture in all cases, can show an average yield of one-half to two-thirds of a good harvest. That diminished yield, moreover, is fully up to the average yield of the great wheat growing States of the Northwest. The Pacific Northwest stands a crucial test of its agricultural capacity as no other region can, and this, its worst year, justly increases its great reputation.

It must be remembered that this is the newest part of the Pacific Northwest, and the least developed. Farming there is only just commenced. They have much land plowed to be sown this fall, but their efforts hitherto have been without system or method. With their farms opened and prepared for systematic cultivation, they will sow their grain in the fall, and be independent of a belated spring for the spring of 1882 was late in coming and land could not be plowed in April, which was an unusual occurrence. The sure way to raise wheat is to sow in the fall, and prepare land the season previous. With that method followed, no possible drought can affect the harvests of the Upper Country disastrously.

GRASSES AND PASTURES.

NUMBER IV.

We propose in this effort to take up the most radical feature of the question, and show that even at heavy expense for preparation of the soil and purchase of seed, pastures are more profitable than any crop the Willamette farmer can raise. While we shall apply the test directly to this valley, it need not be restricted to this locality, but farmers of all other regions, East and West of the Cascades, can draw their conclusions.

We will suppose that land is worth \$30 an acre, in a good locality, close to transportation, and in every way adapted to wheat culture. The fact is established that the only way to grow wheat to advantage is to summer fallow and raise a crop every other year. To do this he plows in the spring and plows and cultivates again in the autumn. He spends money to advantage and pays two years' interest on the land. It is the same as if he had the money loaned, we will say at ten per cent. a year. Then the interest is \$6 on the two years. He is out \$8 an acre for work and seed before he gets his wheat into the warehouse. That is not a large calculation when we consider the superior quality of work necessary to make a good summer fallow. We will be liberal as to returns and concede the farmer 30 bushels to the acre at harvest time. His chance for price for three years past would be \$25 an acre, and a very high return would be \$1 a bushel, or \$30 an acre, which would give him \$5 50 an acre, according to late years' average price, or \$8 an acre if he received the very high rate of \$1 a bushel. The most probable result would be 25 bushels to the acre, and \$20 an acre as his reward, which would give him \$3 an acre profit over outlay and interest on the investment.

We have several times referred to the story we told two years ago of the success met with by Mr. Richard Cary, of Waldo Hills, who said that he had 24 acres of land in pasture on which he expended \$100 for grass seed. This was choice land in the best locality, and will answer our purpose for an estimate, for we do not wish to understate on one hand or over estimate on the other. We desire to be as fair as possible, because we have no object but truth, and that for the good of Oregon agriculturists. Let us estimate: Value of land, 24 acres at \$30.....\$720 00 Cost of grass seed.....100 00 Preparing land for seed, \$2 an acre.....48 00 120 sheep at \$2 a head.....240 00 Total.....\$1,108 00

Mr. Cary said he thought the land could support 5 or 6 head of sheep to the acre all the year, and we have stocked it at the lesser figure. We have estimated sheep at \$2 a head, which is only the price of good, common sheep, while the same land could keep full blooded animals worth ten times the money. In all things we prefer to work on the basis of common life and common stock. Mr. Cary said it might be necessary to feed the stock a little a few weeks in winter. His experience was that he had sown his seed in the spring, put stock on the land the August following, and his stock had never been able to keep the grass, or some of it from going to seed. He said he purchased seed of nine different grasses, red, white and alsike clovers, timothy, orchard grass, mesquite grass, rye grass, English blue grass, etc. He purchased, in fact, all sorts of seeds, and did not make an entirely judicious selection, we thought at the time, and have hoped to hear from him in course of time, a statement of the growth of the different grasses, showing which did the best and were best adapted to this purpose. As we remember it this 24 acres was part hill and part lower land, but none of it really bottom land.

Let us figure on the proceeds, increase and wool from this land. We have put 120 sheep on it, and we will claim 100 yearly increase, and sell that many each year, or rather, allowing something for old age and natural losses, we will claim but 90 increase, though by selling off yearly his surplus stock, the owner can readily get rid of his oldest sheep and have very few, if any, losses. He sells, then: 1,000 lbs at \$2.....\$200 00 900 lbs of wool at 25c.....225 00 Annual sales.....\$425 00 The debtor account stands as follows: Interest on \$1,100 at 10 per cent.....\$110 00 Dipping sheep and feeding in winter months.....90 00 Total.....\$220 00

This is certainly a liberal estimate, especially when we consider that if the sheep are kept up nights the manure that can be saved will be no small object. By this sort of husbandry the farmer leads an easier life, has less care and uncertainty and his returns of actual profit are \$10 an acre, when, by the other, at the highest reasonable expectation of yield and price, he cannot make over \$8 an acre profit, and has a much greater probability of not making over \$3 an acre; he certainly will do well to realize \$5 an acre.

It is undeniable that, as a class, the wheat farmers of Western Oregon are less prosperous than the stock raisers. The latter are sometimes ready to sell out, for they know they can find a wider field in Eastern Oregon, and make more money, but many a wheat farmer sells to pay the mortgage. The wheat crop, however well it may be put in, exhausts the soil, whereas the pasture with its sheep, is recuperating, and is a permanent thing to depend on. One third of the farm in good grass, well put in, with another third in grain, and meadow and summer fallow for the rest, looks more sensible than to only depend on grain. Land that is worth \$30 an acre, that lies in possession of this cheat, or June grass, and cannot support two head of sheep to the acre, is as poor an investment as any man possessed of ordinary reason can possibly make. Our pastures should be matters of pride and profit, and should call out our very best judgment.

This great distinguishing feature Redding's Russia Salve is its power to reduce inflammation.

STATE NEWS.

Lots of drummers in Jacksonville. Several vessels ready for sea at Astoria. The railroad camp over the Umatilla has an extra supply of measles.

The Southern Oregon Pioneers will meet in Jacksonville on September 15th. There is a party from the East in Jacksonville who will start a distillery in that section. Forest fires prevail in Coos county. Apples sell in Baker City for 2 cents per pound.

The Coos Bay fisherman has commenced taking salmon. A money order office has been established at Drains Station. A steady printer is wanted by the Bedrock Democrat of Baker City.

Hounds are reported as killing many young deer in Coos county by running them down. A son of Wm. Alexander, who lives near Roseburg, was accidentally shot through the body, near the lungs and the left fore arm. He is doing as well as could be expected.

Mr. Bailey Willis, the gentleman in charge of the western division of Villard's Transcontinental survey, was in Pendleton, and has gone into the mountains to-day to look at the coal mines lately discovered.

A young man at Centerville, named Eagen, is suspected of having stolen a horse. He borrowed a saddle for a couple of hours, and was next heard of at Wain Springs. The deputy sheriff, Henderson, followed in pursuit.

On last Saturday, says the Roseburg Plaindealer, as the overlaid stage left Roseburg, the silver Comet hand gave it a serenade, and it was intended that the last stage on Sunday would be honored in the same way, but on account of the fatal occurrence of that evening it was dispensed with. On the 14th day of August, 1859, the Overland Stage Company's coaches first arrived at what, at that time, was the very small village of Roseburg.

While the Sargents' men were at work harvesting near Weston, a couple of Indians put down the fence, and taking a rail each advanced toward the header, on which was a young man named Day. The Indians were intoxicated and bent on mischief. They attempted to injure the machinery. Day threw the monkey-wrench, files, etc., at them, when, gathering up the loose instruments, the Indians turned and fled. Day and the other men followed. The same Indians have been the cause of trouble several times in the past few years says the Weston Leader.

Bishop Morris will visit Eastern Oregon next month, and has made the following appointments, subject to some contingent changes: Weston and Pendleton, September 10th; LaGrande, 11th; Walla Walla and vicinity, 17th; Coe, 20th; Baker City, 24th; Canyon City, October 1st.

Says the Union County Record: We learn from M. Baker, agent for the Blue Mountain university, that arrangements have been made whereby the Columbia River Conference of M. E. Churches is to liquidate the indebtedness against the university, and the board of trustees are to put \$1500 worth of improvements on the buildings and grounds.

TERRITORIAL.

Emigrants are passing through Walla Walla daily. A foot race between P. Brandt and H. Marshall, of the Star and Walla Walla clubs, resulted in favor of Marshall, at Walla Walla, on Monday last. Distance, 300 feet.

Citizens of Boise City, says the Sentinel, have raised a purse of \$1000 for a 50 mile race, to be run over the track at that place, at the annual meeting this Fall. We learn at last four well known riders have decided to take a run for this large purse, among whom is C. Steers, Esq., of Union.

A gentleman who is in a position to know informs the Walla Walla Union that the right of way for the railroad from Walla Walla to Milton Junction, 13 miles, has been practically and amicably secured, and that the work of construction will commence as soon as certain documents which are daily expected from the East are received.

Patent Window Ventilation.

M. B. Burke, of Dayton, W. T., shows us a model of his patent window, designed to facilitate ventilation. It is readily adjusted and operated, and really strikes us as possessing merits that should command the attention of builders and architects. The subject of proper ventilation of houses and public buildings does not receive the attention it requires. Mr. Burke's invention is so simple—merely causing the window frame to swing on a pivot instead of moving up and down—that it can be cheaply put in operation. We first knew Mr. Burke here in Portland 31 years ago; he is the father of E. B. Burke, the well known clerk of the courts of Columbia county, W. T. He has sold the county right for Washington county to a well known contractor and builder, who says he can build windows on this plan much cheaper than he can put in the ordinary weights and pulleys. He proposes to sell county rights here and then visit the Eastern States on the same business.

One of the best hotels to be found in all Oregon is the Comopolitan at The Dalles, owned and kept by Mr. Thomas Smith, who formerly kept the Chemeketa at Salem and the Occidental at Portland. With long experience in business Mr. Smith has learned how to provide for the comfort of his guests. The Comopolitan is close to where the trains stop, only a few steps above the locomotive, and always has a carriage at train or boat. It is one of the largest and most commodious of our Oregon hotels, as well as excellently kept.

A Few More Left.

And a happy circumstance it is, too, that notwithstanding the rapidly increasing demand for Hunt's Remedy, there are a few more bottles left. This is, indeed, joyful news for the afflicted. People are beginning to find out they have kidneys, and that weakness of the back and loins, and many supposed rheumatic pains, come from those delicate organs, and be precursors of serious troubles, like Bright's Disease, and of death. People are also finding out that the sure specific for all ailments of the liver, bladder, and kidneys is Hunt's Remedy, and hence the great and increasing demand. And still we are able to say of the bottles of this great remedy, there are "a few more left."

Weston Leader: A field of wheat near Weston gave an average of fifty-two bushels to the acre. The only secret of such a yield is that the grain was put in properly and at the right time.

"Buckwheat." Quick, complete cure, all annoying Kidney, Bladder and Urinary Diseases. \$1. Druggists.