

The Flax Crop.

Editor Willamette Farmer:

I visited the greater portion of the valley part of Linn county, from the 4th to the 10th of the present month (July), and examined much of the flax crop, and heard of the remainder of it in that county. And for your information, and all others who feel an interest in this important branch of our agricultural production—flax—I will prepare a short account of my observations, and the knowledge I obtained from the gentlemen who are engaged in flax culture in Linn county this season. And, as the WILLAMETTE FARMER seems to be the favorite of the working men in Oregon, I would bespeak a place in its columns for the publication of this article. I brought down five samples of this flax, which are deposited in the FARMER office, and first speak of these, and then of other fields of flax.

Mr. Walter Houston sowed 80 acres to flax from the 1st to the 15th of April last. Fifty acres of this was old ground, plowed last fall. The land was moderately rolling, and faced to the south, was rich prairie, and was plowed in the spring, sown and harrowed in and rolled. Forty pounds of Bombay flax seed were sown to the acre. Thirty acres in this field were sod land or bunch grass, broken in the spring, twice harrowed, then sown and harrowed twice again. On the 7th inst. I passed over all parts of the field and pulled from each piece a fair average sample. That from the sod was 35 inches high, and that from the old ground was 25 inches high. The whole was coming into bloom, and not done growing. It was of a dark green color and very rank. The owner was pulling out all foul plants from the flax in order to have perfectly clean seed.

The next piece was on the Boggs' farm at Tangent. The land was old, worn prairie, broke last fall, and again broke in the spring, and sown 40 lbs. of seed to the acre. It was well harrowed, and put in early in April. An average sample measured 37 inches long. It is just in bloom; of a very rank appearance, and Mr. W. Miller, the proprietor of the farm, and a good farmer, is pulling out the foul plants from the flax, and the field is clean and nice.

The next sample, I pulled from a field of about 100 acres in flax, owned by Mr. Houck near Tangent. The land is rich prairie, second or third year in cultivation, broke in the fall, and again in the spring, and well put in with the same amount of seed.—Except some patches on white, wet land, the piece is very rank, stands evenly and presents the most charming aspect of a lake of soft blue flowers, which seemed to kiss the bright sunshine and clear atmosphere, so glorious in our summer season here. Its average height was about 34 inches. I did not see Mr. Houck, but made free to examine his flax and enquire of others concerning the land, &c. He too is pulling out all foul plants from the place. From this field will come much clean seed.

The next sample was from the field of Mr. Rodebrough near Tangent. The land is good prairie, old land, plowed in the fall and well put in about the middle of April. The usual quantity was sown to the acre.—The crop is very rank and green. It is in bloom, and is about 35 inches high and still growing.

Mr. Samuel Plekins, near Ward's Butte, has 25 acres of flax, sown on stubble land and put in in March. It is somewhat foul but stands well, and the bolls are large, and the crop good. Next to the flax, stands a field of fall wheat, sown on last year's flax stubble and harrowed in. The wheat is heavy and good. I examined a field of flax—some 80 acres, near Saddle Buttes. The land was old and foul, the ground rather poorly prepared this spring, plenty of clods and hence poor flax—thin, foul, and low. But the owner merely intends the present crop as incident to a wheat crop next fall, after plowing under the flax stubble. I saw many other flax fields, up and down from north to

south of the county. Every field that had been fallowed or fall plowed and well put in showed a good crop of flax.

Some fields were foul, cloddy, and badly put in. Some of the best wheat which I saw in Linn county was on last year's flax land. The heaviest flax is generally found growing adjacent to the hills east of the Willamette river. Low, wet, white land is not good for flax. Six hundred acres of flax in Linn county are being cleaned from all foul seeds, and kept for seed for the farmers next year. Each farmer, who thus cleans his seed, is to receive two dollars per bushel for such seed, and allowed to retain so much of his own seed as he may wish to sow next year. Thus there is an inducement for all flax raisers to use only clean seed and clean land.

It will be recollected that the Bombay flax seed was first acclimated in the foul lands of California, and thence brought to Oregon and sown. There was much French turnip or wild mustard, and other foul seed amongst the flax, and hence the flax lands here were badly polluted. The farmers were inexperienced in raising flax, and all who sowed foul seed and put the crop in poorly, gathered a poor crop. Some of the seasons were bad, and taking the whole together, inclusive of the hop of the price of wheat two years ago, the flax raising business, and the manufacturing of linseed oil in Salem have not been very paying in this valley up to last year. The Pioneer Oil Company have had severe discouragements to encounter, and had they not been men of strong minds and gifted with energy, they would have failed. But under every discouragement they have introduced their oil to many markets, and it has been well tested, and found to be equal, if not superior to any other oil in the United States. It stands high in California and in the Sandwich Islands. There is one thing now certain, and that is, that Western Oregon is a flax country. And there is another view of the subject, which I wish to impress upon the minds of all: The P. O. Co. can extend the manufacture of linseed oil, to ten or twenty times what they now make, if the farmers will furnish the seed. The more seed, the more oil, and then the more money amongst us. Hence the absolute necessity of a rotation in crops here; and the fact that wheat does follow flax with great success; the flax not requiring the elements in the soil to produce oil, that wheat requires to produce starch. And flax stubble and straw are rich fertilizers; and hence rotating flax, and then wheat or oats, we can have a crop every year.

In selling our flax seed to the P. O. Co., there are no middle men to nibble, nibble at it, like they do on the wheat, but the flax seed goes direct to the manufacturing of oil, and the money passes in full to the raisers of the flax seed. The Oil Company will, in all cases hereafter, furnish none but clean seed, and they will buy in none but clean seed. It will be perceived that it will be at once to the interest of farmers to clean thin lands from sorrel, and all other foul plants. In every case the land should be plowed very deeply in the fall, and well drained of surplus water. Subsoiling in the fall would be an excellent plan, whereby the crop of flax could be sown much earlier in the spring. I have perceived that flax and wheat require the very same soil, seasons, manner of farming and sowing. Now we know that Western Oregon abounds in good wheat land. And another matter of great importance is, that there will not be the fluctuations in the price of flax seed here that there are in wheat. Contracts can be had for flax crops for years ahead here.

The P. O. Co. have sent out perhaps 40 bushels or more of clean lint flax seed to be raised, and the seed brought in for next year's sowing. The Company will purchase all the lint, as well as the seed of this flax, and the lint will be made into bags in Salem. This operation will be confined to Salem. But bag factories can and will be erected in Linn, and other counties, if the lint can be had for them. And there would be another branch of home industry and manufacture amongst us which would retain large sums of money with the people here.

If I had space, I would be glad to branch out and write about wagons, plows, reapers, mowers, and numerous other articles, made and sent here, to the crippling and detriment of our own mechanics and manufacturers. There are more than \$150,000 worth of foreign wagons now in Western Oregon for sale.

But to return again to the flax culture here. It is positively sure that

treatises on flax from States east of the South Pass, will not answer here, no more than such answer for farming, gardening and fruit culture here. All must be learned here from actual experience. Mr. Geo. P. Holman intends to compile and publish a treatise next fall, after the present flax crop shall be saved, from actual data, drawn from the flax raisers in this valley. A vast amount of useful and practical information will be thus had, which will serve as a guide to all in raising flax hereafter in Western Oregon. And it is sure that we can raise just as good hemp here, in the same way and on the same soil, as flax. It is not yet known what can be raised, what done, and how good a country, and what vast resources we have in Oregon. Let foreigners come and see.

DAVID NEWSOM.

July 17, 1873.

Some Facts about Rain.

No one who has traveled in the "Lake District" of England will need to be informed that it is a rainy region. If the tourist is able to devote two or three weeks to it, he may not unreasonably hope to be favored with occasional fair weather; but if he can spend only three or four days among its wild and lovely scenery, let him congratulate himself if they do not all prove to be rainy ones.—Wordsworth could never have seen and snug the charms of the district as he did, had he not made it his home for years.

We have just seen in an English paper an abstract of meteorological observations made by Mr. Isaac Fletcher, M. P., among these Cumberland mountains. For nearly thirty years he has kept rain gauges at various stations, and the record of some of them for the year 1872 is astounding. The rainfall at different points ranges from about 91 inches up to almost 244 inches. At four stations it was above 175 inches. The highest result was obtained at a place known as "the Sty," at an elevation of 1,077 feet, in one of the wildest passes of the region, between the lakes of Derwentwater and Westwater. Mr. Fletcher remarks: "The amount registered on the Sty—nearly 244 inches—is marvelous, and greatly in excess of any previous record. In 1866, 224.56 inches were recorded.—So far as has yet been ascertained, the Sty is the wettest spot in Europe, and, except in tropical countries, the quantities I have quoted represent the two greatest annual falls of rain that have ever been recorded."

But we presume that to many of our readers these figures convey no definite idea of the actual amount of rain that falls at this "wettest spot in Europe." A few other facts will serve as a basis of comparison, and also to show what a capricious phenomenon rain is—the most capricious, in fact, of all meteorological phenomena, both in respect to its frequency and the amount that falls in a given time. There are regions where it never rains—as on the coast of Peru, in the African Sahara, and the Desert of Cobi in Asia—and there are others, as in Patagonia, where it rains almost every day. At most places in our latitude, if an inch falls in a day, it is a pretty heavy rain; but among the Highlands of Scotland and in the English "Lake District," of which we have been speaking, from 5 to 7 inches not infrequently fall in a day. On the Isle of Skye, in December, 1863, 12.5 inches fell in 13 hours. At Joyeuse, in France, 31.17 inches fell in 24 hours; at Geneva, 30 inches in 24 hours; at Gibraltar, 33 inches in 26 hours.

As regards the annual rainfall, the most remarkable is on the Khasia Hills, in India, where it averages 600 inches, about 500 of which fall in seven months of the year. We do not know of any other place where the average rises even to 300 inches, though at two points on the Ghauts Mountains in India it is 254 and 263 inches. At Madras it is 45 inches; at Bombay 75 inches.

It will be seen that the rainfall on the Sty, in Cumberland, approximates to that in the wettest tropical districts. The average in the west of Great Britain and Ireland, in the vicinity of high hills, is from 80 to 150 inches, while away from the hills it is only from 30 to 45 inches, and in the east of England not more than 20 to 28 inches. In France it averages 30 inches; in the level parts of Russia it falls as low as 15 inches.

In this country it averages, in the Southern States, from 50 to 55 inches,

though at some points, as at Athens, Ga., it is only 36 inches. In the Northern States it ranges from about 27 to 45 inches. On the Pacific coast it is 22 inches at San Francisco, but increases as we go northward, being 47 inches at Fort Vancouver, and 90 inches at Sitka, in Alaska.—*Boston Journal of Chemistry.*

A Chinese Protest.

Several leading Chinese merchants have recently presented to the Board of Supervisors of San Francisco, through a Chinese missionary, a remonstrance, in which after rehearsing the cruelties and indignities to which as a race they have been subjected, they remind the authorities of the circumstances in which intercourse with China was opened. They say:

"We wish the American people to remember that the policy of the Chinese government was strictly exclusive. She desired no treaty stipulations, no commercial relations, no interchange whatever with Europe or America. She was not willing that other people should come to reside in her limits, because she knew the antagonism of races. For the same reason she was unwilling that her subjects should go forth to other lands to reside. But the United States and other Christian nations held very different views, and advocated a very different policy. Treaty stipulations, commercial relations, friendly interchange of commodities and persons were demanded of the Chinese. To secure these with China, pretenses for war were sought and found, and as the result of defeat on the part of the Chinese, our Government was compelled to give up her traditional, time-honored policy, and to form treaties of friendship and interchange with our conquerors."

"Under these treaty stipulations," they go on to state, "dictated to Chinese by Christian governments, the people of Europe and America have freely entered China for the purpose of trade, travel, and Christian evangelization." Thousands have settled in that country and amassed fortunes. American merchants and American missionaries are now found in every part of the Empire, although their presence is not desired either by the government or the people.—They say further, "The American and European governments are greatly embarrassing the Chinese Government by strenuously insisting that American and other foreigners shall be permitted to travel, and trade, and preach in all parts of the Chinese Empire without being subject to Chinese law. The foreign Governments insist upon their right to take their code of laws with them into all parts of our country, thus humbling and disgracing our Government in the eyes of our people.—How would that shoe fit the other foot? Or how can they claim to be reconciled to the Golden Rule, considering the present treatment of Chinese in America?"

They ask the American people "to remember that the Chinese in this country have been for the most part peaceable and industrious. They have kept no whisky saloons and had no drunken brawls, resulting in manslaughter and murder. They have toiled patiently to build your railroads, to aid in harvesting your fruits and grain, and to reclaim your swamp lands. Our presence and labor on this coast, we believe, have made possible numerous manufacturing interests which, without us, could not exist on these shores. In the mining regions our people have been satisfied with claims deserted by the white miners. As a people we have the reputation, even here and now, of paying faithfully our rents, our taxes, and our debts. In view of all these facts we are constrained to ask, why this bitter hostility against a few thousands of Chinese in America? Why these severe and barbarous enactments, discriminating against us in favor of other nationalities?"

They then propose as the only just alternative to their being permitted to remain in this country unmolested, "a speedy and perfect abrogation and repeal of the present treaty relations between China and America, requiring the retirement of all Chinese people and trade from these United States, and the withdrawing of all American people and trade, and commercial intercourse whatever with China." * * * In the meantime, as we are here, under sacred treaty stipulations, we humbly pray that we may be treated according to these stipulations until such time as a treaty may be repealed, and commercial intercourse and friendly relations come to an end."

The farmers of Brush Prairie, near Vancouver, have organized a grange and farmers' club.

Grading Sheep.

A great amount of money and labor is spent every year in the United States by wool-dealers in unpacking, grading, and re-packing wool. The writer of this article having had a practical experience in wool fifteen years in Europe and six years in this country, wishes to bring before the public interested in wool a plan to abolish these expenses, which will prove profitable in its working both to the wool-grower and to the dealer, namely—to recommend to the wool-growers to classify or grade their flocks, expelling all inferior sheep, selecting and using suitable rams, and by taking this course to bring the flocks to a standard of uniformity—that is to say, that each flock may represent a certain type or kind of wool, but even and uniform in itself. By adopting this way of treatment, the flocks would be brought, in a comparatively short time, to reach a standard that the clips could be handled and sold by the dealer in the original packing.

The final results would be that the present necessary yearly labor and expenses connected with the grading of wool by the dealer will pass away; lasting improvement would be established by bringing the flocks to a higher uniform standard, and the dealers would, in time, handle and sell the bulk of domestic fleece wool in the original packing.

Considering what a large capital is invested in raising wool in the United States, and what progress has been already made, managing the flocks in the proposed manner would be one step more forward and of far-reaching consequences. Growers of wool would reap the benefit by improving their flocks in this way, and sheep-husbandry would be made more surely a profitable business.—*H. H. Otto.*

The Lower Columbia River.

The Report on the Harbor and Shipping of the Port of Astoria, recently published, states that the greatest obstacle vessels meet in ascending to Portland is the "Hog's Back," six miles above Astoria, where there is but ten feet of water at low tide and eighteen feet at high tide. The argument that follows is that the larger class of vessels, and especially ships loading with grain, should never attempt to load above this bar. That the obstruction does exist at the place mentioned is an undoubted fact. Vessels drawing sixteen to eighteen feet are often obliged to wait at that point for the tide, and most of the vessels that have loaded with grain have gone below this bar to complete their cargoes.

That heavy vessels will ultimately load at Astoria there can be no question. Nor will this be detrimental to Portland. The commerce of Oregon would be injured more by trying to force it over insuperable difficulties of nature, than by making the best of the situation as it exists. Portland can do all the business, can retain her importance as a commercial center, can supply the capital and control the trade. It will be more to her interest to load heavy vessels at deep water where no difficulties will be encountered and the smallest expense incurred, than to allow commerce to be discouraged by obstacles which can in a great measure be avoided.—*Bulletin.*

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