[CONCLUDED FROM PAGE 38]

[For the Deseret News.

Directions How to Raise Hemp and Flax, and the Importance Thereof.

BY S. P. GUHL.

The means which at the present time, are within the power of Utah, and on which she is dependant for supporting a rapidly increasing population, are principally farming and stock-raising, wheat and corn being the principal products.—It being a well established fact that good and industrious farmers are the chief supporters and strength of a State, it is even evident, that the better they are off, the better chance there will be for mechanics and other laborers to rise and improve their condition. Everything that has a tendency to improvement, and of rightly using the soil and elements which are given into our hands, to make us happy and independent, and prepare against contingencies should certainly be considerd earnestly, and acted upon as soon as circumstances will admit.

Among the plants especially adapted for the soil and clime of these valleys, rape, hops, hemp and flax undoubtedly belong to those that might be cultivated with great advantage. I shall here only speak about flax, as important not only on account of the very great produce it will yield, compared with the various kinds of grain, but on account of the influence it would have on our home manufactures and as a useful way of occupying a great many hands, which is not at all unessential considering the number who year by year come to settle here and are partly dependent on the old settlers, and look to them for work to earn their living. There is nothing to hinder us, by taking some pains and by improving the mode of cultivating hitherto followed, from raising flax equally as good and cheap as that raised and sold in the best markets in the world. I have this year worked up a quantity of flax raised in the valley by Mr. Farr, just as good as any I saw in the old countries, though one third of it was spoiled on account of being kept so long without being rotted. One wagon load yielded 109 pounds of swingled flax and would have yielded more if it had been attended to in due time; and according to Mr. Farr's own statement it was raised on one third of an acre.

Flax raising in this Territory has prospered only in a limited degree, partly in consequence of too little pains and attention having being bestowed upon it, and partly because the preparing of the lint has to be done by hands and not by machinery, which adds considerably to the expense, but more still by its being performed by inexperienced hands, by which too much is wasted. The best way would certainly be to have establishments, which would make it their business, on moderate terms, to rot, break and swingle the hemp and flax which the farmers raise. In that way nothing would be wasted, and the lint, tow, oil-seed and seed for sowing might be saved and made as profitable as possible. The farmer might then sell it in such places or have it prepared, as circumstances might require. In the absence of such establishments it is always necessary that the rotting should take place immediately after the pulling, and being dried it must be placed where it is not exposed to rain or dampness, and remain there till the time shall arrive for its further preparing.

In order to do my best to recommend and forward this matter, of so much importance to community, I shall here relate some facts obtained by long experience and observation in other countries, with the sincere desire that experiments may be made by parties on a small scale that everybody interested may be convinced of the truth of what I assert. Mr. Jacobson, in his exhortation to the Danish people, to bestow more care on raising hemp and flax, states, that if the farmers would appropriate one twentieth part of their farming land, to the raising of those crops, it would yearly give the country fourteen millions of dollars more than wheat and barley would give. Thalbeck, in speaking of the same to the Barons and people of Denmark, by way of inducement, states that in the earldom of Ravensberg, containing only about 10 square miles, with a population of 81,812, most of the inhabitants were well off, some rich, and wealthy, all had the necessaries of life and nobody begged, and this flourishing condition was brought about by raising, spinning, and manufacturing flax. The city of Bielefeld exports and sells every year, bleached linen, to the amount of 750,000 dollars, and the whole earldom 1,625,550 dollars worth, besides what is used for their own clothing.

Looking at these facts it would by no means be unreasonable to suppose that if one twentieth part of the farming land in these valleys was used for raising flax, the same result would by and by be obtained here, and at the same time as much or more wheat and corn would be raised; especially considering that our farmers are working a new soil, full of life and vigor, and are not so traditionated that they would not engage in the business when aware of the great profit it would produce. That this can be done all at once, is impossible, but a foundation may be laid now, and good flax, at moderate prices produced here, the rest will soon follow.

The improvement and successful culture of hemp and flax depends, to a very great extent, on getting good seed, and it will be important that we raise it ourselves, that we may be sure to have it perfectly ripe, which is just as necessary as to have a rich, well prepared soil.

Flax seed, by being several years sown in the same soil and clime, will gradually degenerate, the straw will be short, and the lint fail in strength, therefore it becomes necessary to shift seed from another valley or clime every fourth or fifth year. If it is desired to have Russian flax-seed, buy it from those that can be trusted, to be sure that it is good, otherwis buy it from our own farmers, who have treated it in the right way, and not from the stores, where it is likely that different kinds may have been mixed together, which will produce straws of different lengths and quality. Good flax seed should be light brown, a little oblong, full, glossy, weighty, oily and smooth to the touch; inside yellow green, and when thrown into water will easily sink, or when thrown on live coals will loudly snap and quickly burn. All the seed grains ought to be of the same size and color. Seed that is large and broad, dark colored, round and thick is not good for sowing, but should be used for oil only. In Europe the Russian flax-seed if genuine, is considered the best, by farmers who make flax raising their business. It being somewhat dificult to obtain real good, sound seed it is always advisable to test it in the same way as mentioned for hemp seed.

Itis generally believed and has been asserted by many of the principal flax-raisers in Denmark and other countries, that what constitutes the goodness of the Russian flax-seed is that it is generally four or five years old. I think it very likely that it should be so, but consider the changing from one soil and clime to another as very essential; however, by paying attention and care in raising seed we will do first rate with our own products without resort to those of foreign countries.

In order to obtain such a result it will be necessary to divide flax-raising in two different parts, viz.: first, to raise good seed; and secondly, to raise good lint and oil-seed; because in raising good seed, the lint will always be of inferior quality because of the sap and juice necessary to ripen the seed will weaken the lint, and make it coarse and not fit for anything but plain and coarse materials; but good seed being of great value and commanding a higher price, nothing will be lost. Raising good flax-seed requires a rich, mellow soil, well manured, plowed and harrowed. Where flax has not, for several years previously been grown any kind of manure will do. If the seed is good and has been kept three or four years in a good, dry place, it may be sown thinly, but even, so as to leave plenty of room for the plants to grow and expand and draw nourishment from the ground. It should be sown as soon as the ground is in good condition, and proceeded with as with hemp, until the stalks become yellow, the leaves fall off and the seed in the husks has a yellow-brown color. It should then be pulled in dry weather; and tied up in bundles and set up that it may be thoroughly dried by the sun and air, and not get damp before being put under cover, which will cause it to sweat and injure the seed considerably. If thoroughly dry it can be thrashed immediately, if not, the tops should be cut off, spread out in an airy place, and raked and turned often till dry. The seed should then be thrashed and thoroughly cleaned; packed in tight barrels and kept in a dry place. It will be necessary to take it out of the barrels a few times every year to air it and then put back and kept three or four years before using it.

As it is quite necessary that flax-seed should have change of soil and clime every fourth or fifth year, it is very desirable that farmers in the different parts of the Territory should commence raising it in the right manner; and how easy would it be always to have seed of the very first quality, considering the vast extent of our settlements, farmers in the southern having only to swap with those in the northern settlements. The stalks from the seed-flax should be rotted separately and not be mixed with the rest.

The most suitable soil for the cultivation of flax for lint and oil is a rich, mellow, damp soil. New land just broken and well prepared will answer well if rich and manured. It should either be plowed once in the fall and left unharrowed through the winter, that the grass and weed-roots may freze and the ground become mellow, or in the latter part of April, about four inches deep, and then be well harrowed. New and fresh manure is not good; flax will grow first rate on land manured well the year before, where potatoes, hemp, turnips or cabbage have been grown if it has been well cultivated. In such case, no manure is required. When manure is used it must be put on and well spread in the fall, plowed several times to have it mixed with the soil Old cow manure is the best, but mud from ditches and waterings, is good. Flax should not be grown on the same piece of land oftener than once in an interval of about seven years.

The exact time when the seed should be sown, depends on the weather and on the qualities of the soil, and farmers must use their own judgment in the matter. As a common rule it may be put in when the ground is tolerably dry and warm and not frosty at nights. Flax sown early will always be the best and produce the strongest and finest lint. It is best to divide the seed and sow it in the manner recommended for hemp seed. Immediately after a mild rain would be the best time to sow it in April or May, but it might be sown the first of June. It should be harrowed in well, but not too deep. If the land is very loose and dry it should be rolled. Should a heavy rain and then dry weather occur soon after the sowing is done, a strong crust will be formed, preventing the tender plants from coming up. In that event, a light wooden harrow must be applied.

For preparing the ground, care should be taken to have it free from weeds; but should weeding be necessary, it must be done before the plants are more than three or four inches high, for when trodden down they will not rise again. The weeding done, the flax will take care of itself, unless it needs watering to keep the ground moderately moist; but too much water must not be let on at a time.

In nine or ten weeks after the seed is sown, the flax will generally be ready for pulling, and attention must then be given to the appearance of the plants, the leaves will drop off from the root and up to the middle of the stalk, which assumes a pale yellowish color. These signs appearing, the flax should be pulled without delay. If left standing longer it will be materially injured. This is one of the great mistakes committed here, in cultivating flax. If fine lint be desired, the flax must be pulled a little earlier, but not before the seed is nearly full-grown. When pulled, the dirt should be shaken off from the roots, the weeds and smallest flax plants picked out, observing not to disarrange the roots, and laid on the ground one handful across another, till there is enough for a bundle. If the flax is very dry, it may be tied up immediately, and set up on the ground for a few days to dry, and ripen the seed. In case of rain, it should not be tied before it is dry again, but be spread out on the dry ground, it being very important to have it perfectly dried before storing it away under cover; if damp, the lint will loose in strength and assume a color that will be hard to bleach off again. The next step will be to cut off the tops, which can best be done on the flax rake, or a coarse wooden comb, which is a better way than to thrash it out; spread it out and treat as before mentioned. This done, arrange the plants so that the stalks in every bundle will be about the same length.

It has commonly been considered best to rot it directly after the pulling, but later experience has shown that the lint gains and becomes stronger, softer, and more glossy by being kept stored for some time before rotting. As stated about the hemp, the rotting is one of the chief and most important processes in flax raising. The stalk consists of the bark, the lint and the marrow, held together by a resinous sap. To dissolve this sap is the purpose of the rotting. This is accomplished by putting the stalks under water and in the course of a few days a fermentation will take place, dissolving the resinous sap. As soon as this is accomplished the rotting must be discontinued. The same water should not be used more than once for rotting flax, and it should be soft and clean. The flax to be rotted should be put in all at one time. The exact time it will take to rot it depends on the softness of the water, the warmth of the weather, and how ripe the flax is. In hot weather from three to six days will be sufficient; in cool, from six to twelve days will be required.—What has been said about rotting hemp will apply to flax. Should it be likely that wet weather should set in, the flax must be taken out of the rotting ditch a little sooner, and spread out thinly to dry. The breaking, swingling and hatcheling is performed in just the same way as with hemp, only that smaller tools are used, especially finer hatchels—the flax being finer. The seed to be used for making oil should be clean from dust and sand, and may be cleaned either on a fanning-mill, or in a sieve; the cleaner it is the better the oil will be. I will now say no more, but finish my remarks by saying, that what I have stated will be found to be true—acquired by experience and practice, for about twenty years in different parts of Europe.

Planting Fruit Trees.

There are many, inculding farmers and other classes of citizens, who have been in this Territory many years, who have not as yet, set out the first fruit tree of any kind on their farms nor in their gardens, neither have they planted shade trees by the way side, and why we are not advised, but presume they do not know the value of fruit, nor how much it adds to the comfort of life, and in various ways inhances the enjoyments of those who produce it to any considerable extent.

There are but few locations in these valleys, suitable for cultivation, where fruit of some kind cannot be grown, and it only needs a little exertion on the part of those who cultivate the earth, and wish to live comfortably and happily, to produce in a very few years, a sufficient quantity of such kinds, as can be raised in these mountains, to supply themselves and those depending upon them for subsistence, with many of the luxuries of life, which those who know the value and healthfulness of such things can appreciate and enjoy.

There is now a good opportunity for those who wish to set out fruit trees to obtain them, especially apple and peach trees, and they will do well to improve it. Of peach trees suitable for transplanting, there are thousands which can be obtained for a mere trifle, and no person wishing to plant out either an apple or peach orchard can say in truth that trees are so scarce and dear that they cannot be procured.

If there are any who have grounds suitable for growing fruit, who do not avail themselves of the oppertunity they now have to commence orcharding at a trifling expense, it must be in consequence of slothfulness—a chronic affection with which too many are more or less afflicted.

Population of the States Formerly Constituting the United States.

The following table shows the increase of population in the several States which of late constituted the American Confederacy during the last ten years, and the number of Representatives each had by the appportionment made under the seventh census, and the number each would have been entitled to under the eighth census had the Union remained unbroken.

POPULATION OF FREE STATES.

States.	Population, 1850.	Population, 1860.	Apport'd New.	Apport'd Old.
Maine	583,169	619,958	5	6
New Hampshire	317,976	329,072	3	3
Vermont	314,120	315,827	3	3
Massachusetts	994,514	1,231,491	10	11
Rhode Island	147,545	174,621	1	2
Connecticut	470,792	460,670	4	4
New York	097,394	3,851,563	30	33
Pennsylvania	2,311,786	2,918,018	23	25
New Jersey	489,333	676,035	5	5
Ohio	1,980,427	2,377,917	19	21
Indiana	988,416	1,350,802	11	11
Illinois	851,470	1,691,233	13	9
Michigan	397,654	754,291	6	4
Wisconsin	305,391	758,485	6	4
Iowa	192,214	682,000	5	2
Minnesota	6,077	172,793	1	2
Oregon	13,294	52,566	1	1
California	92,597	384,770	3	2
Kansas	—	143,645	1	1
Total	13,454,169	18,950,759	150	149
Increase in ten years				5,496,590

SOUTHERN OR SLAVE STATES.

States.	Pop'n in 1850. Free.	Slave.	Pop'n in 1860. Free.	Slave.	Apport'd. N.	O.
Delaw'e	89,242	2,290	116,548	1,805	1	1
Maryland	492,666	90,368	646,183	85,382	6	6
Virginia	949,133	482,528	1,097,373	495,826	11	13
N. Car.	580,491	283,548	679,965	328,377	7	8
S. Car.	283,523	384,984	308,186	407,185	4	6
Georgia	524,503	381,682	615,336	467,400	7	8
Florida	48,135	39,309	81,885	63,800	1	1
Alabama	428,779	342,892	620,444	435,473	6	7
Mississippi	296,648	309,878	407,051	479,607	5	4
Louisiana	202,953	244,809	354,245	312,186	4	4
Arkansas	162,797	47,1000	331,710	109,065	3	2
Texas	154,431	58,161	416,000	134,956	4	2
Tennessee	763,154	239,460	859,528	287,112	8	10
Kentucky	771,424	210,982	920,077	225,490	8	10
Missouri	594,622	77,422	1,085,595	115,619	9	8
Total	6,412,503	3,200,412	8,434,126	3,999,283	84	89
Total population, free and slave, in 1850						9,612,915
" " " " 1860						12,433,409
Increase in ten years						2,829,494.

Why Nations Die.

Cultivated Greece and all-conquering Rome; Vandal and Goth, and Hun and Moor, and Pole, and Turk, all are dead or dying! Why? Murdered by nations more powerful? Swallowed by earthquakes? No, not by any of these. Not by the lightning and the thunder; not by the tempest and the storm; not by poisoned air or volcanic fires did they die and do they die. They perish by moral degredation; the legitimate results of gluttony, intemperance, and effiminacy.

When a nation becomes rich, there is leisure and means of indulging in the appetites and passions of nature, which waste the body and wreck the mind. As with nations, so with families. Wealth takes away the wholesome stimulous to effort; idleness opens the flood-gate of passional indulgence; and the heir of millions dies heirless and poor, and both name and memory ingloriously rot!

If then, there is any truth and force in argument, each man owes to himself, to his country, and more than all, to his Maker, to live a life of temperance, industry and self-denial.—[Hall.

Some Pumpkins.

Good old Dr. Bigler, (we will call him,) was a Baptist preacher in Indiana, and never liked to have any one beat him in telling a round, full-proportioned story. A wag, seeing him coming down the street, said to his cronies, "Now I mean to stump that old gentleman." So, in his approach, he said:

"Doctor, I really wish you had seen a piece of land I have on White River. I planted corn and pumpkins on five acres and when I cut off the corn, the pumpkins were so thick along the ground, that I could step from one to the other cross the whole field!"

The Doctor, nothing loth, drew up, and eyeing him a moment, broke forth:

"Why, sir, that was very well, but I had a ten acre field last fall, on which the pumpkins lay so close to each other, that when I stood at one corner and hit one pumpkin with my feet, it jarred the whole ten acres of them."