

FLAX CULTURE IN EUROPE.

Report of a Government Agent Sent to Investigate It.

THE PRACTICE IN BELGIUM.

Soil Preparation, Good Seed and Careful Handling Being the Best Results—How the Crop is Harvested.

Charles Richards Dodge, an agent specially appointed by Secretary Rusk to investigate the subject, makes a report on flax culture in Europe, of which the following is a summary:

The finest flax grown in Europe is unquestionably produced in western Belgium. While the superior quality of Courtrai flax is claimed to be due chiefly to the action of the soft, slowly running, almost sluggish waters of the river Lys, without doubt there are three other important factors which aid in the result: First, a soil preparation, with systematic rotation of crops and extent of fertilizing that few, if any, flax farmers in America have ever practiced; second, the use of only the best seed; and lastly, most careful handling and skillful manipulation from the time the crop is ready to pull until the straw goes to the scutch mill. Nor is the care and vigilance even here.

I was informed that flax succeeded best in a deep and well-cultivated soil that is not too heavy, experience proving that in a dry calcareous soil the stalk remains short, while in heavy clay soil it grows very long, although its fiber is not so fine. The ground is plowed either in the fall or spring—plowed or spaded, for a great deal of the flax land is turned with the spade. The work may begin in November, sometimes a little earlier, or it may be put off until February or the first days of March. I was told that both methods had their advocates and opponents, and that either season may be advantageous or disadvantageous according to the amount of winter which follows or precedes.

In the matter of enriching the soil there is no half-way work or turning "short corners." Where stable manure is used it is generally put on before winter sets in. Then in spring before sowing the ground is heavily treated with fertilizers, or night-soil in solution is poured over it. A great deal of the material is brought from the towns and kept in closed receptacles or reservoirs until the time for using it on the ground. Stable manure is used in connection with chemical fertilizers. Of the latter it is common to employ from six to eight hundred kilograms per hectare, or roughly, from five to seven hundred and fifty pounds per acre, and to go over the ground with the liquid night-soil in addition.

But the Belgian flax farmer does not depend upon careful fertilizing or cultivation alone to put the soil in proper condition for growing flax, a careful system of crop rotation playing a very important part. Regarding the precise order of rotation and even the length of time between two growths of flax on the same land, there is the greatest difference of practice in the several districts and even in different towns of the same district, so that one absolute course of cropping can be laid down. In the Courtrai region the occupancy of the land with flax varies from five to ten years, the average being about eight. In the eastern districts it is, on the whole, in the Brabant five to eight. In some other sections a much longer time elapses between two crops of flax, and one or two generations back fifteen and even eighteen years were sometimes allowed to intervene.

One informant stated to me that flax was most generally sown after wheat and especially after stubble being highly approved. A common rotation is clover, oats, rye, wheat, and in some cases corn. Cereals, tubers, beans, peas and vegetables (these latter crops on farms contiguous to towns) or even onions and salads, are grown, as in middle Belgium. Clover is considered one of the best crops to precede a crop of flax, as its numerous roots serve to loosen the soil and from their decomposition not only furnish nutriment to the growing flax roots, but enable them more easily to push down into the soil. In the pamphlet of instructions published by the French government, it is stated that the Belgian rotation is first a crop of flax followed by corn (maize) after potatoes, mangold, or beet, clover not being mentioned at all.

After spading or plowing, the ground is well broken with the harrow, often times being brought almost to the condition of garden soil. It is then rolled and the seed planted, this being done any time from the last week in February until the latter part of March, dependent upon the weather.

It is considered of prime importance that a good quality of seed be used, and in Belgium the greatest care is taken to secure only such a quality of seed as will give the best results. The appearance of the grain, its richness in oil, the absence of all foreign odors, its uniformity and bad condition, purity, and its germinating power, are all considered, and no test neglected that will enable the cultivator to assure himself as to what he is buying.

The seed is usually sown in the morning and harrowed with a harrow set with very close teeth. This is considered necessary for giving a uniformity to the stand of flax in the field, insuring the same standard of fineness in the flax as a standard product for every part of the field.

This country, two poles first being laid upon the ground to prevent injury to the bottom layer by dampness, and two poles driven at each end of the pile to keep the "bedges" in form.

In piling it is the custom to reverse the beds in alternate layers; before the top layer is put on a row of beds is laid lengthwise near the edge of the pile, so that the top layer will be given the proper slant to shed the rain. The flax is left in this position for several weeks, and then either retted very soon or put into immense stacks, or sometimes into sheds, to remain till spring.

The seed is usually removed soon after the flax is pulled. A common method of accomplishing this is to draw the heads through a batch or comb of square iron pickets some fifteen inches high. These pickets are about half an inch wide at base, and as they are pointed at the top, the spaces between them grow narrower as the bottom board into which they are driven is approached by the head of the bundle of flax straw, and the seed capsules are dislodged. When the seed is dislodged, they are threshed with an instrument made from a square block of wood, either flat on the bottom or fluted to form coarse teeth, a curved bundle being mortised into the top.

There are three systems of retting practiced in Belgium, the dew retting most commonly followed in the neighborhood of Brussels, and in the flax district I visited near Gembloux; the retting in crates anchored in running water as practiced in the river Lys, in the flax district of Namur; and the flax straw into pools or cisterns as soon as pulled, which pertains to the Wes country and some other sections. The dew retting need not be described here, as it is the usual practice in our own country, and need not be described here, as it is the usual practice in our own country, and need not be described here, as it is the usual practice in our own country.

Any good soil that will produce a good crop of wheat, oats or barley will suffice for flax. The soil must be in good condition, but must not have had manure recently applied before sowing the seed; plowing should not exceed four inches in depth. The best rotation is to sow flax after oats from a lea ground; that is grass land which has been prepared for and has been plowed in autumn, again in February or March, harrowed and rolled until the soil is thoroughly pulverized; destroy all weeds before sowing flax seed. This seed should be sown about the second week in April. When the plants are about four inches high all weeds must be pulled, the boys and girls who do the work to proceed against the wind, that the flax plants may be blown erect when the weathers have passed on.

When the straw begins to turn yellow and the foliage within six inches of the ground is drooping, pull at once. At this stage the seed in the bell is changing to a dark green or brownish tinge. Tie the straw in small bundles and stand on end to winnow. When quite hard and dry put in stack. There is a larger and better yield of fiber when the seed is kept until the first following its growth. If fiber is required at once the seed can be rippled and the straw steeped in soft water, that is rain water, or if this is not attainable, in pits of water which has been kept in the open, and which has been exposed to the sun for a period of five or six weeks. The straw should be protected from the earth at the sides of the retting pits; place the straw in layers until the pit is quite full; stones or planks of wood, with stones on top to keep the straw from the water; the water is laid upon the top layer of flax straw. If the temperature of the water is 80° Fahrenheit or upwards, about six days will be sufficient to ret the straw. From the fifth day examine a few stalks at different parts of the pit several times daily, and when the fiber pulls readily and entirely of the woolly core it is time to remove from the pits. Stand the sheaves on end to dry; pull the band or tying on each sheaf and beat the top of the sheaf with the root ends, so as to expose the sun and wind. When perfectly dry stack for a few weeks. This improves and mellow and brings "nature," or a soft silky feeling to the fiber. It is now ready for the machine.

CULTIVATION IN THIS COUNTRY. For the guidance of those who wish to try the experiment of growing flax for fibre the present season a few brief hints are given. Much has been said in the direction of the soil, a moist, deep, strong loam upon upland giving the best results. Barley lands in the middle states and west prairie lands and old turf in the western states are frequently chosen. On the contrary, the soil for the production of woods is not to be thought of under any consideration. Some New York flax growers incline to a heavy clay for the production of fibre and seed, though the choice of a wet soil will be fatal to success.

Flax culture in Russia is carried on upon the vast plains in the interior subject to annual overflow from the rivers. As we have seen, rotation of crops is an element of success in all foreign countries where the flax is produced. By studying the practices abroad the American flax grower can determine the best in his own practice. Fall plowing is desirable in our own country, with a second plowing in the spring as early as possible. Then harrow, reduce to fine tilth and roll the ground well before putting in the seed. Mr. Proctor, who has in a prize essay on flax culture published six years ago, lays great stress upon the matter of reducing the soil to fine tilth and rolling well, the object being to have the surface of the ground as smooth and uniform as it can be made, so that the flax may get an even start, grow more uniformly and the surface of the ground be better to work over when the flax is pulled. Of course all stones should be removed or pressed into the earth, and lumps are to be equally avoided. Phosphates, plaster, ashes and salt are considered the best manures. Dr. Ure recommends a mixture of 30 pounds of potash, 28 of common salt, 34 of burnt gypsum, 54 of bone dust and 96 of manure, which he claims will replace the constituents of an average acre of peat. Belgian farmers use liquid night soil or other liquid manure collected from the cow-house and stables. It is fermented in cisterns and is sometimes mixed with oil cake. One trouble with stable manure is its liability to contain ungerminated seeds of weeds, which is as fatal as a weedy soil. And weeds may also be sown with flax seed that has not been carefully selected. As a final preparation for sowing the seed it has been advocated to sow the seed with a harrow the day the seed is to be sown, so that the soil will be sown to destroy all the little weeds that may be just appearing, then put in the seed while the soil is fresh.

Only the best quality of seed should be used. Mr. J. R. Proctor of Kentucky advises that the white seed is the best seed for American flax-growers. In all cases the heaviest, brightest and plumpest seed should be preferred. Finer fiber is obtained from early sown flax than from later sown, and two bushels per acre is the smallest quantity that should be sown when the best results are desired. When sowing for the production of seed alone, two pecks to a bushel will suffice, this allowing the plant to branch. The larger the quantity of seed therefore the finer the straw, and likewise the fiber. After the flax is plowed or harrowed, some growers also advocate rolling. As to time for sowing, a New York grower says: "Sow when the soil has settled and is warmed by the influence of the sun, and weeds and grass

have begun to spring, and the leaves of trees begin to unfold."

Too early sowing may result in injury to the young plants. The weeding, which this is necessary, is performed when they are less than five inches high.

ARLINGTON HEIGHTS.

One of the Most Beautiful and Picturesque Spots About Washington.

A Washington sight well worth seeing is the Sunday pilgrimage to Arlington. The miles of smooth city pavement, which make driving in the capital always delightful, are far less crowded on one day of the week than the rough, dusty road which leads out through Georgetown, across the bridge, and then winds gradually up the heights, says Kate Field's Washington. A continuous train of all sorts of vehicles, as varied if not so numerous as the famous Derby day procession, keeps the dust whirling in dense clouds from noon till sunset.

Do you know that series of old prints, "The Voyage of Life," which still hang in some rural parishes to frighten the drowsy and puzzle their elders? In one corner of each of the series is a group of faintly-outlined white buildings supposed to represent the heavenly mansions. The view of Washington from Arlington Heights on a spring day shows just the same white marble grandeur rising out of a violet haze that you find in the corners of those old prints.

At every turn in the winding road you see the monument in a new position, until you shut your eyes suddenly, a dozen slender, shining white shafts will design in front of them. Dr. Holmes and Mr. Story have lately said some very shabby things about the monument which have pained me greatly. Both insist that an obelisk should be a memorial to the dead. Why does the design to say in praise of the Washington memorial is that it is "the tallest chimney in the world, and the ugliest."

It seems to me a vain affection to deny the effect of great size when united with symmetrical proportion. Why does the leading actress on the stage always wear the longest train, though it may be entirely disproportionate to her height? It is because the eye will pay tribute to size though the mind does not, and an extra half yard of satin or velvet in the wrong place would prove a serious rival to the best acting. The monument would not be nearly so impressive if it allowed a rival landscape. To object that "it is inappropriate as a tribute to Washington" is still more absurd. The father of his country, with all his many sterling traits, was a vain man, and imagine that the costly simplicity and severity of the great white shaft pleases him immensely. It is seen at its best in a misty morning when the sun is out of sight. The gentle slope of the sides suggests by the logic of proportion a much greater height than the real one; and you can easily imagine that the apex is actually lost in the clouds.

But to return to Arlington. It is a little melancholy to see the fine old mansion stripped of furniture and scrubbed and whitened as only buildings under military control can be scrubbed and whitened. The tiled porch surrounded by Doric columns seems proof against heat, and strikes those who enter from the outside sunshine with a sharp chill.

What a delightful place it must have been in the days of its now vanished glory, to spend a long, hot summer afternoon.

Just in front of the mansion, on the levellest spot in the grounds, is Sheridan's grave. A stout rail and many keep-off-the-grass signs are intended to hold the public at a distance; but hero-worship is stronger in most men than the soldierly virtue of implicit obedience, and last Sunday at least half a dozen little bunches of wild flowers laid carefully at the base of the stone showed these patriotic souls had violated the law. Of course Grant, too, should be buried at Arlington. It is better to have such reverent sentiment concentrated in one beautiful spot than to dissipate it all over the country.

Every tissue of the body, every bone, muscle and organ is made stronger and more beautiful by the use of Hood's Sarsaparilla.

Three Stylish Spring Bonnets. Pale blue and black is the favorite combination in hats and bonnets of the latest importation. Here are three of them, says the Ladies' Home Journal.

A wide-brimmed hat of shirred lace, turned up at the back with an exquisite bow of pale-blue gros grain ribbon; in the center of which is a tiny bow of black velvet ribbon; drooping from this all over the crown are bunches of pale blue sweet peas, with black velvet bow on the brim in front.

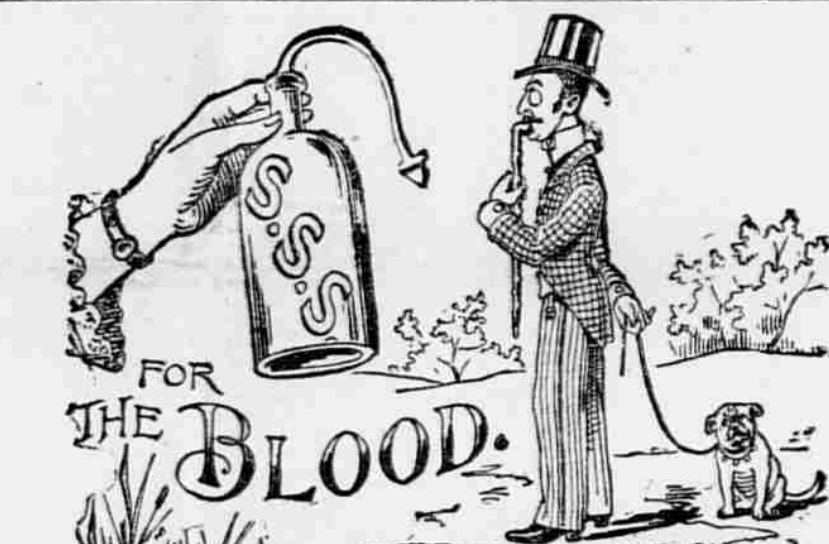
A Marie Stuart capote is of black braids with fine wreath of pale forget-me-nots under the edge all around; a pert-looking bow of pale blue gros grain ribbon stands on one side of the pointed front; there is a smaller bow or knot of ribbon at the back, from which depend the long ties of hair ribbon.

A hat with projecting brim, narrow at the back, is of black open work braid; the brim is faced with shirred pale blue crepe; the crown is of black point d'esprit over a puff of pale blue; at the back is artistically arranged a bunch of forget-me-nots, pale blue tips, from which depends a scarf of the point d'esprit, a yard and a half long, to be wound about the neck and fastened on the left shoulder.

A Pennsylvania Solomon.

"Squire Morrissey of Georgetown recently rendered a decision which fairly eclipsed the famous one by Solomon. John Painter of Welsh alley arrested three neighbors named, respectively, Dougherty, Pickett and McGuin on a charge of pigeon-stealing. The 'squire' heard the evidence carefully, and by way of settling the point at issue, which was an intricate one involving the question of ownership, he ordered the pigeons brought before him.

The coach bird he attached a colored ribbon, and then in the presence of some 200 witnesses gave them freedom. They darted off toward home, and watched vigilantly by the 'squire and his companions; finally alighted. Instead of their destination being at the home of either the defendant or plaintiff it was found to be the coop of a third party, named James Kane. James was immediately sworn and testified that he had sold the birds a few days ago to the defendants. On the strength of this testimony the latter were discharged and the costs put upon Painter.



FOR THE BLOOD. A Slight Mistake.

Just so! ho! ho! why yes, indeed! I see! I see! 'tis this I need To cleanse my blood, this S. S. S. This Swift's Specific, comes The four has made was rather huge. Why! I've been taking verminage!

This dude will, no doubt, take S. S. S. and make a man of himself. Reader, if you are a patient that seventy-five percent of the ill of the flesh are due directly or indirectly to poison in the blood. Would it not then be well to examine closely into the cause of your troubles? Thousands have done so, and have taken S.S.S. to be cured by it sound and well.

Cured by S. S. S. after the Potash and Sarsaparilla Mixtures had failed.

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It composed principally of the following herbs: Sarsaparilla, Yellow Dock, Stillingia, Senna, Dandelion, Buchu, Rhubarb and Ginger, with Iodide of Potassium. The rhubarb to relieve the bowels, sarsaparilla, yellow dock, stillingia and buchu to cleanse the blood; iodide of potassium to open the glands and secretions of the body, ginger to relieve the stomach and intestines, senna to increase the secretions

YOUR BLOOD IS YOUR LIFE

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