



INDUSTRIAL OREGON PRODUCES QUALITY PRODUCTS



This cut is used by courtesy of the Associated Industries of Oregon

This cut is used by courtesy of the Associated Industries of Oregon

Dates of Slogans in Daily Statesman

- (In Twice-a-Week Statesman Following Day)
- (With a few possible changes)
 - Loganberries, October 1
 - Prunes, October 8
 - Dairying, October 15
 - Flax, October 22
 - Filberts, October 29
 - Walnuts, November 5
 - Strawberries, November 12
 - Apples, November 19
 - Raspberries, November 26
 - Mint, December 3
 - Great Cows, Etc., December 10
 - Blackberries, December 17
 - Cherries, December 24
 - Pears, December 31
 - Gooseberries, January 7, 1925
 - Corn, January 14
 - Celery, January 21
 - Spinach, Etc., January 28
 - Onions, Etc., February 4
 - Potatoes, Etc., February 11
 - Bees, February 18
 - Poultry and Pet Stock, Feb. 25
 - City Beautiful, Etc., March 4
 - Beans, Etc., March 11
 - Paved Highways, March 18
 - Head Lettuce, March 25
 - Shoes, Etc., April 1
 - Legumes, April 8
 - Vegetables, Etc., April 15
 - Grapes, Etc., April 22
 - Drug Garden, April 29

"OREGON QUALITY" products are establishing themselves in world markets; they make our pay rolls; they build our cities; they attract new capital and new people; they provide a market for the products of our farms. Oregon farms produce a wider variety of profitable crops of "Oregon Quality" food than any other spot on earth.

THIS WEEK'S SLOGAN

DID YOU KNOW that ours is the best country in the world for the production of flax for its fiber—for the making of yarns, twines, thread and linens; that our water, being "soft," is just right for the treatment of the flax straw, and taking it through all the processes of manufacture, from the retting to the weaving of the cloth; that our climate and elevation are just right; that, when these facts become universally known, the flax industry will be fully developed here, and that it will bring to our valley a hundred million dollars annually; that we have now in operation our first mill for making flax yarns, twines and threads and are to have soon our first mill making linen cloth and that Salem is already the fiber flax center of the United States?

THE MILES LINEN MILL DELIVERED ITS FIRST ORDER FOR ONE OF ITS MANUFACTURED PRODUCTS ON TUESDAY OF THIS WEEK; ENOUGH SALMON TWINE TO MAKE UP A NET

After Many Months of Planning and Building and Installing and Trying Out of Machinery, the Miles Linen Company is in Productive Operation, Turning Out Seine Twine and Shoe and Harness Thread and Other Grades of Flax Yarn Twine—Machinery All Imported, Superintendents From the Belfast District

The Miles Linen company, manufacturers of salmon twine, linen shoe and harness thread and flax yarn twine generally, is at last entering into regular manufacturing, at their new mill at 2100 Fairgrounds Road street. This is on the "Pacific highway, and Salem's first linen mill plant attracts the favorable attention of all tourists and others passing through.

The first regular order was delivered on Tuesday of this week; October 20th. It was an order for sufficient salmon twine to make up a fishing net for work in the Columbia river. The net will be made up by the buyer of the twine at once, and it will be used in the river all winter, giving it a severe test.

Other inquiries for the manufactured output of the pioneer Salem linen mill are coming. The new factory is on the map now, as a going concern, after many months of planning, of negotiating

THE WORLD FIBER FLAX SITUATION ACCORDING TO A FEDERAL BULLETIN

The United States Department of Agriculture Takes a Survey of the Yield in All the Principal Fiber Flax Growing Countries—Prof. Hyslop Says Oregon Growers Must Give Attention to Profitable Production

General statistics on the world flax fiber production were released by the United States department of agriculture, October 5, 1925. They indicate that there has been a steady upward trend in fiber flax production since 1921 and in some sections the production has increased quite materially. Russia was formerly the great flax producing center insofar as fiber was concerned and was responsible for most of the world's fiber crop. Since the war statistics on Russian flax have been very limited and in many cases unreliable, and so there are many instances in which the Russian estimates have been omitted. However, it should be born in mind that Lithuania is a country that was formerly part of Russia and that was the center of the fiber flax industry. This country had something over 30 percent increase in acreage in 1925 and a very substantial increase in the number of pounds of fiber. The following figures are quoted from "Foreign Crops and Markets," a publication of the United States department of agriculture.

Country	1924 Acres	1925 Acres
England - Wales	5,700	3,700
Northern Ireland	42,800	37,800
Netherlands	31,200	35,200
France	48,500	49,000
Italy	51,100	49,400
Czechoslovakia	54,100	61,000
Yugoslavia	32,300	33,000
Bulgaria	600	700
Lithuania	152,000	200,200
Finland	13,100	13,600
Total	431,800	483,600

Continued Increase in World Flax Fiber Production

Although there are few definite estimates of acreage and production of flax fiber the estimates available together with information concerning the condition of the crop indicate that the upward trend of fiber flax production which has been in evidence since 1921 will be continued in 1925.

Production estimates are available for four countries other than Russia, including an estimate for Lithuania which has been ranking third or fourth in importance in late years among the world's flax fiber producers. The total production for these four countries for 1925 is 21 percent greater than for the same countries in 1924. Acreage figures are available for ten countries excluding Russia, which use part of all their crop for fiber. Lithuania is the only country of importance. The total acreage for these countries for 1925 is 12 percent greater than the same countries for 1924.

For Poland, Belgium, Latvia and Estonia, all more or less important flax fiber producers, no estimates of production or acreage are available. Conditions of the growing crop were average or better around the first of August for all the countries except Belgium for which no report is available. The fact that in the Netherlands the production was less this year than last, with an increased acreage, does not point to a hopeful outlook in Belgium. A more recent trade report states that in Latvia unfavorable weather conditions have not improved the prospect. In August Great Britain and Northern Ireland expected an average yield of good quality. In the Irish Free State

G. R. HYSLOP,
Corvallis, Ore., Oct. 16, 1925.

(Prof. Hyslop is good authority on flax crops at the Oregon Agricultural college.—Ed.)

THE LINEN INDUSTRY IS ONE OF THE MOST STABLE AND RELIABLE OF THEM ALL

It is the Oldest of the Textile Industries, and the Uses of the Products of Flax Are and Will Always Be Next to Universal—The Predictions of a Year Ago Coming True

Flax is the oldest known vegetable fiber used in the making of articles for wear and household use. It was grown before the dawn of history. In ancient Egypt, and in the Bible lands, the flax are found in the tombs in the "Valley of the Kings," where the mummified bodies of the great houses (pharaohs) were put away 6,000 years or so ago—and samples of these fabrics, many of them preserved in the British museum, show weaves that our modern machinery and methods cannot duplicate.

Predictions Coming True

In the annual flax slogan number of a year ago, the Slogan editor said:

WITHOUT PARTICULARIZING, IT MAY BE DEFINITELY STATED THAT SALEM IS TO HAVE LINEN MILLS, AND THE WRITER BELIEVES, SOON.

AND THIS IS SUFFICIENT EXCUSE, IF ANY WERE NEEDED, FOR CALLING ATTENTION TO SOME OF THE BENEFITS THAT WILL ACCRUE FROM THEIR SUCCESSFUL OPERATION HERE.

The above predictions have come or are coming true. It is as important as ever to know that the raising of flax and the making of linens will make a permanent industry here, and that it is destined to be Oregon's great industry; that it will grow into a \$100,000,000 industry annually, and then more; that it will support, directly and indirectly, a million people, when the \$100,000,000 mark is reached, and double that many in due course of time.

Our linen industry will be as permanent as our paper industry based on the fact that the world will always need paper; that paper is made from cellulose, and that there will be cellulose as long as there is any vegetable growth that will stand up; that has fiber from the very garden weed to the giant of the forest.

So there will be need for the manufacture of flax as long as civilized man shall use napkins or table cloths or towels or handkerchiefs or linens or lace or clothing.

And so long as he paints houses or automobiles or any single thing on which paint is used, from a hairpin to a floating city called a ship; and so long as he uses putty for windows or doors in shacks or palaces, or skyscrapers; and so long as he makes linoleum for his floors.

Because linseed oil is flaxseed oil; lin is the word for flax in the French, and several other languages. Linseed oil is pressed or boiled out of flaxseed; yielding in weight 35 to 41 per cent of the flaxseed; about 35 per cent from the flaxseed grown on the fiber flax in the Salem district.

ning into "yarn" for thread or twine, or for weaving into cloth of various kinds.

The water of the retting tanks is used for fertilizer. The oil meal after being pressed for the linseed makes dairy feed. So do the bolls with the broken and small seeds. The latter is also good for horse feed. The shives or woody part of the flax straw—the inside part after the fiber, which is on the outside, is taken off—is burned for fuel in making steam heat or other heat.

So there is no waste in flax—absolutely none.

The pulled flax does not exhaust the soil as much as grain crops, or cabbage, or potatoes. A second crop the same year may be grown in flax land. With proper rotation, flax may be grown for 1,000 years on the same land. It will produce each year what will sell, when manufactured, for as high as \$24,000 an acre, or more.

It will go on doing this forever. So the flax and linen industries are good for all time. They will last as long as civilization lasts. They are payers of high wages and salaries. They may be developed here in the Salem district, on less than 100,000 acres of land, giving employment to over 1,000,000 people, directly and indirectly, for all time.

There are only a few districts in the world in which the finest fiber flax can be grown and retted and manufactured with the fields within eyeshot of the factories. The Salem district is one of these. It is the only one having a vast acreage available. We have the setting to become the Belfast of the New World. And more than a Belfast, for we have the American genius for quality production. We will see linen, five times as durable and potentially valuable as cotton goods, cheaper in the markets of the world than cotton goods. Perhaps before very long and Salem ought to, and no doubt will, have a master hand in bringing this about.

Pulling by Machines

The Vessot (Canadian) flax pulling machine has operated in the Salem district for three years: in 1923 with one machine, which first machine has gone through the three seasons in first class shape; with six machines in 1924, and nine machines the past harvesting season. There are 13 of these machines here now, all owned by growers with the exception of four, which still belong to the state flax industry, but they will all likely be used the coming season.

These machines reduce very materially the price of pulling flax, and they do it better than it can be done by hand. Some growers say machine pulling can be done for htee than a third of the cost of hand pulling. The price of hand pulling here has been \$20 an acre. But this does not account for the costs of getting the laborers and finding places for their camping or keeping, etc. Some growers have estimated the total cost at \$30 an acre, for hand pulling.

Machine pulling will make possible the growing of flax in large fields. It will make possible the rapid growth of the linen industry here.

The reader will note herewith a cut of the puller that has been used here. Its operation is simple, to one with a mechanical turn of mind. The flax is caught in three sets of running belts, as shown in the illustration, carried quickly to the binder at the top of the machine, where it is bound and then dropped to the ground. It works like a binder of equal size and solves the problem of flax pulling. On account of the short fine root, flax is easily pulled when caught by running belts.



The Vessot (Canadian) flax pulling Machine



A view of the main machinery building of the Miles linen mill

or and buying and shipping machinery, erecting the necessary buildings, getting the machinery installed and worked out, and all the other details incident to the beginning of such an enterprise.

The main machinery building is substantial, light, thoroughly ventilated, and modern and well adapted to the work within its walls. It is made largely of concrete and glass.

Brought Across the Water

The machinery was all made abroad, on special order; mostly in Belfast, the great world linen center. Bertram Thompson, superintendent of the mill, is from Belfast, where he had a thorough training. J. Stuart McNeill, machinist, is also from Belfast. The man who had oversight in installing the machinery had just finished the installation of the machines in the Henry Ford linen plant near Detroit.

Robert H. Dann has general charge of the management of the business of the mill.

Process in the Mill

"The Miles Linen company realizes that the whole community of readers of The Statesman is very much interested in the success of the work undertaken at the New Linen mill," said Mr. Dann yesterday, "and some day soon we are planning to have an open house, when we hope all our friends will come and see the pro-

cess. The machinery is very interesting to watch, and we want to give you time to watch it."

The following is a description of the process through which the fiber passes. In the first place the fiber is sorted into various grades. Then it is taken to the roughers, men who take the pieces and divide them into smaller bits, combing out the worst of the tangles. This roughing process is a hand operation that requires considerable skill.

The process from here on is to take a pound of fiber, which will be about 24 inches long and reduce this to the required number of yards to make the twine of the size desired. For example, it is necessary to make one pound of fiber 24 inches long spin out to 4800 yards, or even to many times that number.

The first step necessary in this is to take the fiber and comb it so that the fibers will become separated into what is more nearly

removed in the softening machine. It is then wound onto another bobbin and made into balls.

The raw materials for this, or any linen mill are the flax fibers. These are furnished under contract by the state flax plant for the present, up to the immediate requirements.

But the Miles Linen company managers are preparing for the future. They have already purchased the plant of the Turner Flax Fiber company, at Turner, seven miles south of Salem, and they have doubled its capacity by erecting two additional retting tanks. As the business progresses they will further fortify themselves in the matter of raw materials.

B. C. Miles is the largest stockholder of this company, and all of the stock is held by Oregon people; practically all by Salem people.

That there will be expansions in this mill, there is no doubt; though every step will be well considered.

The mill now employs about 25 people. About 30 will be needed when everything is in full operation. All is in readiness now excepting the installation of some of the electric lights. In time, of course, larger forces will be needed.

THE SECOND LINEN MILL ACTIVE SOON

(Continued from page 7)

for the raw materials that will be needed.

Under Good Auspices

Hon. T. B. Kay, state treasurer, is the president of the Oregon Linen Mills, Inc., and T. A. Livesley is vice president. James Riddell of Monmouth, M. G. Gundersen of Silverton, Julius L. Meter of Portland, and Col. W. B. Bartram and John H. McNary of Salem are directors, besides Mr. Kay and Mr. Livesley of Salem, who are also directors. R. O. Snelling of Salem is secretary-treasurer.

The Canadian group of linen mill people, the most extensive manufacturers of linens in North America, are large stockholders and therefore concerned with the success of this second Salem linen mill.

their real state. The combing machine, or hackle, combs each piece or handful of fiber over 15 different combs, or tools. The number of teeth on these tools is graduated, from one pin to every four inches to 30 pins to the inch. The finer the quality of the work desired the more pins per inch are required.

The hackling machine delivers the fiber in a continuous strip or sliver. This is received into a can. The full cans are then placed behind the first of five machines that take the sliver of fiber and draw the fiber out to the required length for spinning the number of yards needed to produce the finished product. This process is called preparing, and consists of a series of machines that take the fiber passing it through the machine. Rollers at the back of the machine retard the progress of the fiber while rollers at the front turn much faster, with the consequent result that the fibers are slipped past each other as the front rollers nip the ends of the fibers, drawing them ahead of the fibers following. The fiber in the sliver form is thus reduced in the weight of the yard, or the number of yards per pound has been increased. This is a technical process that needs to be seen to be understood.

Making the Yarn

The sliver of fiber is now reduced in width and weight to the place where it is ready for the spinning frame. The type of frames used in our mill are known as Gill spinning frames. Their particular difference from the usual wet spinning frame is that the final drawing out process is done in the same way as the preparing machinery performs the operation, and that the sliver is only dampened and not thoroughly wet in hot water. The spindles on the spinning frame are turning at the rate of 2300 revolutions per minute. The amount of the twist that can be given is the yarn as it is formed can be regulated to suit the needs of the trade. Following the spinning, the fiber, which is now called yarn, is run off onto the reel, where it is made into hanks or skeins. These hanks consist of 12 cuts of yarn; each cut has 120 threads, and the length of the circumference of the reel is 50 inches. There it is pos-

ible to get a measure on the yarn and determine if the previous processes have produced the required number of yards to the pound of fiber.

The yarn is then boiled to remove certain gums that add to the weight and do not have any further value to the yarn.

After the yarn has been sufficiently boiled it is then dried. It then becomes necessary to have it back on a bobbin so that it can be worked on the twisting frame. This is accomplished on the winding frames, where the yarn is taken from the hanks onto the bobbins. The twisting frame, the next process, takes a given number of individual yarn lengths and twists them together, the amount of the twist being regulated on the machine. Here again the thread, or twine, as it is now called, is dampened a little and so has to be made into the hank to be dried. After drying it has a hard laundry feel, which has to be

EVERYTHING THE EAST HAS AND MORE

Editor Statesman:

It has been my good fortune and pleasure to spend the past week on a diversified Oregon ranch, consisting of some 50 acres on which were 20 acres in prunes, 4 1/2 acres in pears, 1 1/2 acres in strawberries and the balance in grain land, together with a small grove of elegant fir trees.

This ranch is located 2 1/2 miles south of the city limits of Salem and owned by a former resident of Illinois, viz. Jas. G. H. Wolfe, same being typical of the many ranches in this valley.

Being a tourist from Illinois and an old friend of Mr. Wolfe and family, I was persuaded to spend several days on the ranch and gain some first hand information relative to Oregon and what the state has to offer tourists and home-seekers, particularly in the Willamette valley and in the vicinity of Salem.

I was agreeably surprised to find that almost everything in the nature of commodities can be

(Continued on page 10)