

Soils and Crops

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CAN WE PULL DOWN OUR SILOS?

BY N. A. DRUMMOND.

The harvesting of the corn crop last fall was rather a heavy operation in many localities; hence the question is (a popular one for discussion): Can the silo be abolished? Some of the farm papers have opened their columns for a rigid discussion of the problem, and I have followed them closely. Now I am living in the Province of Quebec, and pretty well north, therefore I think I am in a position to voice an opinion on the corn crop as a safe one for eastern Canadian farmers in general. On the farm on which I live, corn, alfalfa, and all clovers seem to thrive equally well; and they all are giving satisfactory results and none of them are to be despised. There has been a silo on our farm for many years; in fact, so far as we know, my father's was the first in Pontiac County, and he probably harvested the first alfalfa seed in the county. I am comparing corn to alfalfa because, if corn were not grown, the alfalfa alone could replace it, I believe. And the change from the one to the other, if it were ever considered, should be cautiously and carefully executed.

The corn crop we have just harvested was exceptionally heavy and much lodged by fall rains; hence, it was a very heavy and difficult operation, to say the least. The field consisted of eight acres which filled our silo, 33x14½, after refilling it three times; besides this we had 50 loads to stook. And drawing and stooking corn takes time. Not only was this heavy labor, but it cost money; for an engine \$2.50 an hour was paid. Then remembering neighbors' time when we should have been at home cultivating the stubble. No doubt a corn crop, provided that it has been well cultivated, leaves a field in a good state of cultivation, but if the same time which is lost in filling silos were spent in after-harvest-cultivating, more

than an equal advantage would be obtained.

Then there are other costs: In this section, the life of an ensilage cutter has averaged about four seasons; at least they were laid away and pronounced unsafe, and, of course, no man would venture to use them. And who would blame them? The life, too, of a jointly-owned binder is very short. Thus the cost of silo, seed, cutter, binder, cultivator, twine—besides the application of all the barnyard manure is enormous; without maintaining the labor. However, there is one consolation—a silo sets off farm buildings to advantage, and silage seems to have a tendency to keep stock healthy—this itself is worth much.

On the other hand, alfalfa has many merits in which corn falls down. In the beginning, if one cultivates the field the previous autumn and then sows the best alfalfa seed available—grown in your own locality if possible—a good catch is almost assured. Of course, it is better to inoculate the seed. Now you have it established, and when established little further trouble will be encountered. It's grand stuff to have! In this district, 3½ to 4 tons per acre are often harvested with a value equal to bran, and bran is \$30 per ton; therefore, an acre of this crop is worth around \$100. And this is not all. As it grows it collects nitrogen from the air, deposits it in the soil; and it also sends its branch roots and rootlets far down into the soil, loosening and making plant-food available. And so, instead of depleting the soil of plant-food, as corn does, it deposits and makes more available by its action.

Which shall it be—corn or alfalfa? Or some of each? Which can be grown to best advantage on your individual farm? Find this out. If you live near a city where land is of high value your opinion may be biased in favor of the corn, but, generally speaking, the other has merits which weigh heavily upon my mind at present.

POULTRY.

A bred-to-lay male birds should have four things, each of almost equal importance, because the lack of any of them will adversely affect the offspring. The four characters are breed type, bred-to-lay breeding, constitution and vigor.

The male bird should be fairly typical of the breed he represents. If he does not possess breed type, the general type of the flock will not be uniform and the sale of his progeny, especially the male progeny, will be very limited. No good poultry breeder purchases male birds simply because they are male birds. Breed type in the male either sets or scatters type in the poultry flock.

That the male should be of the right breeding is of the greatest importance if high egg production is the desired object. There is no surer way to failure than to introduce a male bird of a poor producing line. The degree of success met with in the egg production of his daughters depends almost entirely on the amount of high producing ancestors he has had. Certainly his dam should have produced 200 eggs or over in her pullet year, and if his granddam has laid 200 eggs or over in her pullet year so much the better. His sire should be the son of a high producing female, and the more high producing females the male side of his pedigree carries, the greater are his chances of passing on that desirable character to his progeny. So important is this one character that a good bred-to-lay strain can be ruined in one season by an inferior male.

Constitution is very necessary if the stamina of a high producing flock is to be maintained. To improve the laying ability of a flock is wasted time unless the birds have the constitution to withstand the strain of high production. A male of poor constitution seldom if ever passes on rugged constitutions to his offspring. The right male bird is one well grown for his age, and that stands straight on his legs. He should have a good full breast, good depth of body, and above all, a good masculine head.

Vigor is also very important, for without vigor the hatchings from the matings would necessarily be limited. Vigor in the male bird will give good fertile eggs that will hatch strong chicks, the kind that can kick the shell to the other side of the incubator, dry off rapidly, become fluffy, and get well along the way to maturity with a low death rate and the least trouble and greatest profit to their owner.

SHEEP

Succulent feeds, which are keenly relished by sheep, are valuable for their tonic and regulating qualities. Roots, such as turnips or mangels, are possibly the most satisfactory form of succulent feed, but they cost considerably more to grow and store than silage. It is sometimes more convenient and profitable to feed the latter, as it has been found that good quality silage, free from moulds and low in acid, can replace roots in the

ration of the pregnant ewe if proper care is taken as to the amount fed. Some good legume hay should form the main part of the roughage, this to be supplemented with not more than two to three pounds per head per day of silage. If the silage is from a well matured crop and consequently high in dry matter, the larger quantity may be fed. If from a green, watery crop with consequent low dry matter content, then less should be fed. Mouldy silage is more injurious to sheep than to other classes of live stock, so only silage free from mould should be fed. Corn silage is the best known and therefore most recommended for sheep, but other silages, such as peas, oats and vetch, clover or sunflowers may be used, though in the latter case, much smaller quantities would be advisable, owing to the high moisture content. Frozen silage should not be used as scouring and bloating may result. The reason that care must be taken in regulating the amount of silage or other succulent fed to pregnant ewes is that it is claimed that too much will cause weak, flabby lambs. The ration of silage may be increased slightly after lambing as it will assist the milk flow and there is not then any danger of affecting the lamb. Ewes which have been penned in good condition in the fall should not require any grain feed when receiving a ration of legume hay and silage.

Cultivation of Asparagus.

Asparagus should be grown much more extensively than it is, remarks a Dominion Experimental Farm Superintendent. It is expensive to start a good plantation, but asparagus cultivation, although it takes three or four years to become profitable, possesses this advantage—that the plantation, if well made and cared for, will last many years and perhaps a lifetime. There is really only one species of edible asparagus in Canada though a large number of varieties and strains are advertised. Experts assert that Bonvallette Giant, Conover Colossal, Palmetto, and Argentuil are all strains of the same variety. As in other vegetables, many qualities are looked for in asparagus, says Mr. G. A. Langelier, of Cap Rouge, Que., the Superintendent referred to, but the most important are productiveness, market quality, disease resistance, size, color, uniformity, and tall growth before branching. The best preventive of rust, to which asparagus is subject, is to keep the plants strong by cultivation, proper fertilization, and not to cut during too long a season. In a test of ten strains at Cap Rouge, Que., Experimental Station, results for which are set forth in report of 1922, Donald Elmira has best met the qualities looked for.

If a horse is standing uncovered in cold weather, cover him. If his blanket has fallen or blown off, pick it up and put it on him.

The organized marketing of farm products can become efficient and effective only when backed by a well-balanced production program.

THE CHILDREN'S HOUR

THE LITTLE BOY'S DREAM.

It was all dark outside, and, oh so quiet. Only once in a while did the big yellow moon peek out from behind the clouds to make spooky shadows on the earth.

The little boy went to bed early, for after tramping in the woods all day with his father, he was very tired.

"What a fine pet Bruin will be when I get him trained," thought the little boy. "We will have big times like I and Rover used to have. I believe I can hitch him to my little wagon."

Right then the little boy's eyes went shut and he was off for Dreamland. To-night it was different than he had ever seen it before. There were trees, oh so many, and there were houses among them.

The queer thing about it was that animals lived in these houses. They even came up to talk to him and he was surprised to find that he could talk to them. But the biggest surprise of all came when he looked down at himself and found that he was covered with a coat of fur. He felt of his face and found a long snout where his nose had been. His ears were little sharp wooley ones.

"Why, I really am not a boy at all," he thought, "I am a bear."

He rather enjoyed this new change at first and stopped and talked with all the animal folks he met.

But as he was walking off among the big trees, all alone, something suddenly grabbed his foot. My! how it did hurt, and he cried with pain. Poking the leaves away with his other paw he found that his right one had been caught in his father's big trap.

"Oh, daddy, daddy, help me. I am in your trap," he cried.

It was a long time before a man came, but it was not his father. The little boy tried to tell what he wanted, but the man did not seem to understand. Roughly he put a muzzle with a long rope fastened to it, on the boy's head and let him out of the trap. Still he could not get away. The man pulled and jerked on the rope and led him a long way off through the woods, and shut him up in a little shanty.

He was tired, hungry and thirsty, but could neither eat nor drink because of the horrid muzzle. The bed was so hard and cold, he could not even sleep.

"And then! Bi-bu-bang!"

"Oh my, where am I?" asked the surprised little boy rubbing his eyes.

Looking around, he found he had been sleeping on the floor. He felt of his foot and it really wasn't hurt at all. It had all been a dream.

"Bears do have feelings, just like boys and girls," thought the little boy. "We treated Bruin so mean yesterday. I never want to hitch him to my cart. Just as soon as the sun is up I am going to skip out and unfasten Bruin's chain so he can go home, wherever that is." And he did.

Bruin couldn't quite understand it all, but he winked and blinked his thanks to the little boy as he limped off toward the woods.

Home Education

"The Child's First School is the Family"—Froebel.

Regularity in Home Living for Children

BY HELEN GREGG GREEN.

"I can't understand why Throck is doing so poorly at school," complained Throck's mother to Miss McHenry, his teacher, who was calling at the child's home.

"Mrs. Carlton, I think I know the reason," Miss McHenry answered, "and I thought you'd want to know about my discovery, so I came over."

"Indeed, I do, my dear," and the mother was all interest. "His chum, Bernard, across the way, is doing such splendid work."

"To-day I asked the children to write a short theme on their day's schedule. Most of them admitted a sort of haphazard existence, minus any regular routine. But one child, a little girl by the name of Nana, who does good work, wrote such a sensible little theme I thought it might help other mothers. So I brought it to show you, Mrs. Carlton," and the teacher handed her Nana's composition.

Throck's mother read:

"My mother has a sort of time schedule for my brother and me. We have to get up every morning, including Saturday, at seven o'clock. Mims calls once only! We have the use of the bathroom from seven to seven-thirty-five. After that, Father has it. Then we eat what Mims calls a 'simple, nourishing breakfast.' Usually it is either hot oatmeal and milk, fruit, toast, and milk, cold eggs, toast, and milk, or bread and butter and warm milk. We have plenty of time every morning to eat our breakfast,

Beeswax, How Obtained.

Beeswax, the natural secretion of certain glands situated in the abdomen of honey bees and produced chiefly by the younger members of the hive is used extensively in the manufacture of many products such as harness oils, polish, lubricants, candles, floor wax. It is also used by electricians, pattern makers and dentists. The greater part of the wax produced, however, is used by beekeepers in the manufacture of comb foundation.

As wax is worth more than three times as much per pound as honey, every particle in the apiary should be saved. In an apiary run for extracted honey the greater part of the wax will be from cappings while a large amount can be obtained from broken or discarded combs and pieces of burr combs scraped from the hives and frames during the summer.

As a certain amount of impurities are present in the wax as taken from the apiary it is necessary to adopt some method of rendering or extracting the wax pure. Two methods are in general use, one by using the heat from the sun and the other by means of artificial heat. Rendering wax by means of the solar wax extractor is a slow process and only suitable for small amounts of cappings or pieces of new comb. For a large amount of cappings and new comb most of the wax can be extracted by melting it in hot water and then allowing it to cool. The wax being the lighter will rise to the top and harden.

For old combs that have been used in the brood chamber or contain pollen it will be necessary to use pressure to separate the wax from the refuse. Several good hot water presses are on the market and any one of them will soon pay for itself in a fair sized apiary. The combs are first placed in a tank containing hot water and thoroughly melted. A sheet of burlap or some similar material is spread over the bottom rack of the press and two or three gallons of the molten mass is poured into it. The edges of the burlap are then folded over evenly and another rack placed on top of it. The press is then filled with boiling water. The top rack is then pressed down by means of a screw and the wax forced out of the cheese in the burlap. It is well to release the screw once or twice during the operation so that the refuse becomes well saturated with the hot water and then to press again. The wax being lighter than water will float to the top and can be run off into moulds.

Some presses are fitted with three racks so that three cheeses can be pressed at one time. Further details on rendering wax can be obtained from Experimental Farm Bulletin No. 26, on "Bees and How to Keep them." This bulletin can be had from the Publications Branch, Department of Agriculture, Ottawa, Ont.

Cost of Maintenance of Dairy Cattle.

In investigational work conducted at the Ontario Agricultural College with dairy cattle, the cost of maintenance for dry cows and heifers was shown to be \$8.60 per month. Some work was also done in an attempt to discover a satisfactory method of handling veal calves from dairy cows. The results show that dairy calves for veal should be marketed at the earliest possible age at which the market will accept them. It was also found that to make satisfactory veal whole milk was necessary.

In gradually increasing the number of good cows we are following the course of older civilization where the cow is indispensable.

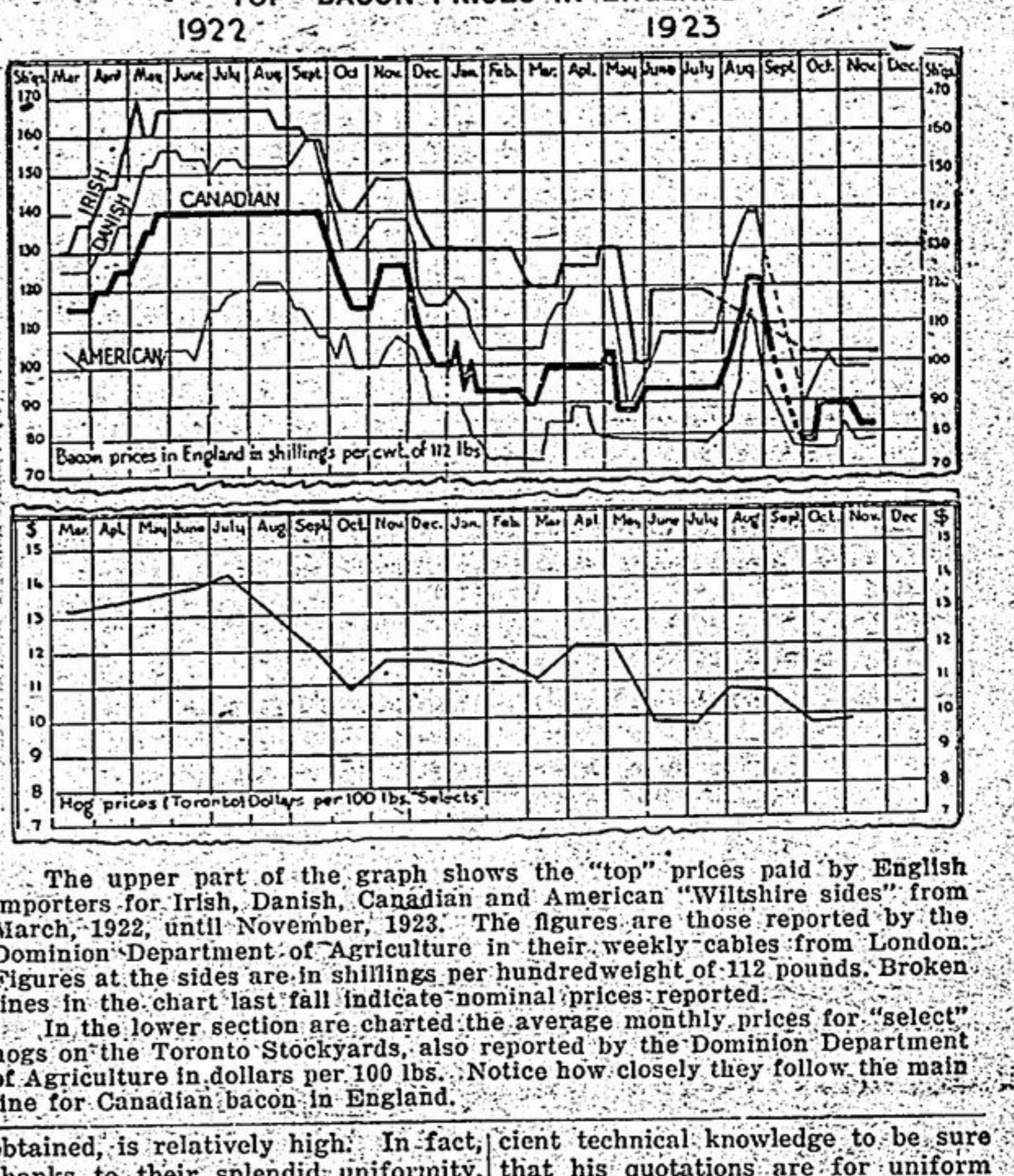
RELATIVE POSITION OF CANADIAN BACON ON THE ENGLISH MARKET

"Top" Prices of Weekly Report Do Not Represent Bulk of Supply.

For the last twenty months the Dominion Department of Agriculture has issued a weekly report of cabled prices of bacon in England, which, if properly read by Canadian hog raisers, will serve a useful purpose. Like other statistics the report should be read with a clear knowledge of what it is intended to convey. The prices given are "top" market quotations for Irish, Danish, Canadian and American imported "Wiltshire sides" in London.

The variations since March, 1922, can be seen on the accompanying chart. The prices quoted are in shillings per English hundredweight of 112 pounds. No doubt they are as accurate as can be expected of cabled information but they are not entirely representative of the relation of Canadian and Danish prices.

And for this reason: Danish exported bacon comes from hogs of which 85 per cent. rank firsts, and the quantity of their yield for which "top" or near prices can therefore be



The upper part of the graph shows the "top" prices paid by English Importers for Irish, Danish, Canadian and American "Wiltshire sides" from March, 1922, until November, 1923. The figures are those reported by the Dominion Department of Agriculture in their weekly cables from London. Figures in the chart are in shillings per hundredweight of 112 pounds. Broken lines in the chart last fall indicate nominal prices reported.

In the lower section are charted the average monthly prices for "select" hogs on the Toronto Stockyards, also reported by the Dominion Department of Agriculture in dollars per 100 lbs. Notice how closely they follow the main line for Canadian bacon in England.

obtained, is relatively high. In fact, thanks to their splendid uniformity, the bulk of Danish bacon may be reasonably put near the top quotation mark.

This is not so true of Canadian bacon. As the percentage of our hogs grading "select" is smaller, uniformity in product is difficult to attain. Much of our bacon does not get the "top" prices. There is often a difference of ten shillings below the cabled prices paid for a considerable part of the shipments.

These facts should be known in the Dominion, for there is always a tendency natural in the circumstances, for the seller of hogs to relate his prices to the prices he may fancy is paid for all export bacon. The fact that the cabled reports are official makes one all the more ready to assume for the prices a degree of accuracy that they as a matter of fact cannot possess, taken only on one day in the week.

O.A.C. Farm Crops.

The crop acreage on the Ontario Agricultural College Farm for the season of 1923 was as follows: 105 acres of oats, 40 acres of mixed grain, 30 acres of barley, 40 acres of silage corn, 8 acres of mangels, 8 acres of turnips and 117 acres of hay, including 20 acres of alfalfa.

The hay crop was very heavy, over 100 good loads being taken off one 30-acre plot of new seeding.

Alfalfa also promises well on the College farm at last. Two good cuttings were taken from the 20-acre field and the crop has gone into winter in first class condition. Success following failure is largely attributed to the fact that the present crop was grown from homegrown Ontario Variegated seed.

The corn crop was not quite up to standard, two or three heavy storms breaking it down badly and injuring growth. There will be enough silage for winter feeding.

The mangel crop was lighter than usual, although the stand was good. There are over 4,500 bushels in the collar. The turnip crop was a bumper one—the largest produced on the farm in years—and made up for the falling off in mangels. There was over 6,000 bushels from the 8 acres.

The summer pasture problem was not so acute this year. By keeping the cattle off the permanent pasture until June 6th, it got a good start, and frequent rains kept it fresh and growing.

Twenty acres of sweet clover held the dairy cattle until the aftermath in the hay fields came on. This aftermath on 97 acres of the hay crop was luxurious and pasture remained fairly good till late autumn.

As usual green feed for stabled hogs was produced from a few acres of peas and oats sown at the rate of three bushels of oats and ½ to 1 bushel of peas per acre, according to size of the peas.

Get the Ice Hook.

One of the ways in which the farmer may employ winter days to aid during the hot busy weeks of the summertime, is to put up an ample supply of ice. Each summer a large percentage of farmers declare themselves that the following winter they will certainly put in such a store. However, when winter comes this job is delayed until too late.

It is important to have everything in readiness when the water has frozen to sufficient depth to be harvested. Erecting loading platforms, repairing of the ice-house and providing an ample supply of dry hay or sawdust should be seen to at once. All tools, such as saws, picks, and other implements needed, should also be ready for use on a moment's notice. Ice, like other crops, must be harvested when it is fit.

Grease the Way.

As a little axle grease applied to the point of a nail will make it drive much easier in seasoned wood, so will a little of the oil of human sympathy and interest make the ways of life more smooth for those whose yolks are heavy. Furthermore, as the grease tends to prevent the nail from rusting in the wood, so will the sympathy keep alive the fires of love and joy within our lives.

Keep a small magnet hanging in the kitchen. It can be used to pick up spilled tacks, and with it you may recover a metal part of the stove which sometimes slips out of place.