

Soils and Crops

By Agronomist.

This Department is for the use of our farm readers who want the advice of an expert on any question regarding soil, seed, crops, etc. If your question is of sufficient general interest, it will be answered through this column. If stamped and addressed envelope is enclosed with your letter, a complete answer will be mailed to you. Address Agronomist, care of Wilson Publishing Co., Ltd., 73 Adelaide St. W., Toronto.

SPRING VS. FALL FRESHENED COWS.

Many farmers take it for granted that to have the cows freshen in the spring, it will make a greater profit than if they came in in the fall. One farmer who thought that way, told me his reason: "The principal thing that appeals to me," he explained, "is because what I get from the cows in the summer, is practically all profit. I do not have to give them much grain. They take care of themselves excepting around milking times, when I then have to get them into the barn, and out the first thing in the morning. I figure the profit that I get in the summer is worth enough to pay for the rest of the year."

We all know that cows, naturally, are apt to do their best in the summer time. Therefore to get the greatest profit from them, in the winter, conditions should be made as near like summer as possible. In the summer they get all of the nice fresh water with no ice in it to make it too cold. How many farms are there that have facilities so that the cows can get the same in the winter? Cows enjoy the nice warm days in the summer, too. Barns therefore should be kept warm and comfortable for them in the winter time. Two cold barns require more feeding of grain, which is expensive; as much of the feed has to go to keep the cattle warm. And they do not give as much either, under such conditions. Light is another important thing to consider. Plenty of windows to let as much of the sunlight into the tie-up is important if we are trying to imitate summer. Dark, damp stables make cows uneasy and discontented, and also help to breed germs of different diseases.

When the cows are at pasture in the summer, they get juicy, green, succulent feed. Such a ration may be given in a way by means of a silo. If the silage is put in before the frosts kill it green and succulent feed is assured, for the winter time. All farmers who have fed silage can testify as to the great fondness which cows have for it.

So, to get the best results from winter-kept cows, it can be seen that by making conditions as near as possible as the cows get in the summer, the greatest profits are obtained. While it is true that the expense of grain and feed is much less for cows at pasture in the summer, perhaps I feel that on the long run, cows that freshen in the fall, pay the best. Unless the pasture is extremely good, along the last part of the summer it begins to get short and the grass dries up and without getting feed in the barn the cows drop off. How many farmers are there that consider it, and fail to feed their cows? And by the time the cows are taken in, in fall, they have dropped off in their milk flow and cannot be gotten back

again to where they should be. Consequently they are carried along without paying the profit that they might, until they freshen again.

Cows that have their calves in the fall, can be taken particular care of, and can be made to do their best. To get the greatest profit from ensilage it should be given to cows that are giving their largest flow of milk. To feed valuable ensilage to cows that are only giving their half flow of milk, is a waste of good feed. Such great results are obtained when given to cows that are fresh, so fall cows bring in the greatest profits from silage.

As a rule the price of milk is more in the fall and winter, too; and to get more milk (from fresh cows) makes more profit also. Cows that are taken care of properly, will give more during their lactation period beginning in the fall, than those that come in in the spring.

And winter-kept cows will go to pasture when it is at its best, in the spring. There will be no drop-off, which is the case with spring-freshened cows that go through the dry-pasture period.

Cows that are kept during the winter have to be fed grain. The extra amount of grain which should be given to fresh cows, is more than paid for as the extra amount of milk given is more in proportion.

Also, the work needed to take care of a certain number of cows, is nearly the same whether they give a large amount of milk or little.

Then, again, calves that are born in the fall, grow better and are larger and stronger and are ready for pasture sooner than spring-born calves. Calves raised in the summer are bothered with flies and the hot summer is bad for them and the feeding pails, etc., are easily contaminated if not washed very promptly and carefully; scours are more easily gotten therefore. Also, calves wintered in a nice warm barn do not have these risks to bother.

So it is seen that if the cows are taken care of properly, after freshening in the fall, they will return more profits in proportion for any extra care and feed given them, and by the time they are nearly ready to dry off, the dried-up pasture is not doing the harm that it would to a cow that is giving a large flow.

Of course, even under the best of conditions, farmers cannot always have their cows come in at the fall, and also with a large herd of cows, it would not be well to have all have calves in the fall, or at the same time. But, by realizing that the fall-freshened cows bring the most profits, if taken care of as they should be, farmers can, by planning ahead, make the most money from their cows in the end.

Horse Sense

Bright oat straw is wholesome winter roughage for idle horses. Many good feeders figure that every ton of good oat straw which the horses will eat saves half a ton or more of valuable hay. Some of the very best pure-bred draft mares in the country are fed good oat straw as their exclusive roughage during the winter months. The only other feed they receive is about three or four pounds of grain a day to each mare, as may seem necessary to keep the digestive system working properly.

The fact that straw is a heat-producing feed is of importance because the best feed for producing warmth to idle horses is also the cheapest. Idle work horses require only sufficient grain to maintain them in good flesh condition; all the rest of their feed may well consist of cheap roughage, provided it is clean, bright and free from injurious substances. By feeding more bright straw and just enough grain to keep their digestive systems in good order the work horses can be wintered so cheaply as to greatly reduce the cost of maintenance, and this means considerable reduction in the cost of operating a large farm where several work teams are kept during the year.

What Causes Stunting?

Stunting of young animals is a serious matter. Steps to prevent stunting really should begin before the animal is born. To that end it is necessary and profitable to feed the pregnant animal well, so that she may properly nourish her young and have plenty of milk for it when it is born.

Calves are stunted by feeding milk

in large quantities twice a day. The natural way to feed calves is to allow a little milk often, and certainly not less than three times a day. The milk should be warm, the milk pail clean and the calf should be made to drink slowly.

Lambs do not grow fast because the ewes have been wintered on coarse, dry, bulky roughage. Colts are stunted for the same reason, and also because the mares are made to work too soon and too hard after foaling and allowed to suckle their young when hot, sweaty and tired.

Worms are the most common and certain cause of stunting. They are certain to infest and injure every animal that grazes short grass on an old pasture long used by animals. Each kind of animal taints the pasture with the parasites peculiar to it. Pigs afflicted with piles or prolapse of the rectum have been stunted and often prove a total loss. Lack of exercise, constipation and feeding of some irritant, such as unscreened ground oats, containing hulls, are common causes. Prolonged heavy feeding of boiled potatoes is another cause. Stuffing young pigs on corn and confining them to a pen also causes stunting, as well as rickets or paralysis.

After the Grain Harvest.

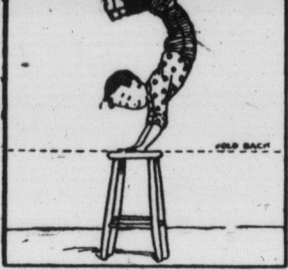
Points worth remembering, they mean money to you. The tender clover and timothy plants require all growth possible as a winter protection, therefore keep all livestock off the newly-seeded meadows, because if pastured after harvest, the young plants are so weakened that winter-killing is the usual result. While, on the other hand, if a strong growth is left for protection, winter-killing is avoided and usually big crops of hay are harvested the following season.

Deserved Decoration.

"Have you a wife?" inquired a British Tommy of a boche he had captured. "Nein," replied the German. "Nine," gasped the Britisher in amazement. "Ninna, where's your iron cross, man?"

FUNNY FOLD-UPS

CUT OUT AND FOLD ON DOTTED LINES



IF I WERE ONLY TWINS YOU'D SEE THE FAMOUS TEAM OF 'ME AND ME'



Poultry

The fowls and eggs from a pure-blooded hen will bring more money on account of their uniformity.

One of our most conservative poultrymen says that if all farmers would keep pure-bred poultry, the business would be doubled in a few years and that we would still be getting good prices for our products.

Many people are getting tired of eating pork and old dairy cows, and are becoming eaters of chickens, mutton and veal, thus increasing the possibilities of the sheep-and-poultry business.

When poultry can eat and thrive on all kinds of foods and produce good results, it is very good evidence that they are constitutionally strong.

The Silo, The Lighthouse of the Farm.

During the last few years stock-raisers have floundered around quite a bit and occasionally one has hit a rock and gone down. Fortunately, every stock-raiser can have a lighthouse that will keep him, as well as an occasional neighbor, off the rocks and guide the way to better farming and bigger profits. That lighthouse is the silo.

There is no longer any doubt that silos point the way to safe farming. Thousands of satisfied users have killed all the doubt.

In more ways than one a well-filled silo keeps stock-raisers off the rocks. The use of silage cheapens beef, milk, mutton and wool by cutting down the amount of grain needed. Silage is valuable for lambs in the feed lot, and for wintering the breeding ewes.

Silos are the greatest food savers known to stock-raisers. An acre of corn fodder put into a silo has more food value than an acre of corn. There are several reasons for this. One is that when corn is put into the silo none of it is wasted. The whole plant except the root goes in; when it comes out it is so palatable that the cattle, horses and sheep eat it with a relish. Another economy is that the corn is stored at a time when it contains the greatest amount of nutrients. Every person with a dozen cows should have a silo. The diameter should be determined by the number of animals. For twelve cows, make silo ten feet wide and thirty feet high; fifteen cows, twelve feet wide and twenty-six feet high; twenty

PIGS, PORK AND PATRIOTISM

By A. M. Porter.

If we are to continue to provide meat for foreign people as well as our own, every farmer must put forth his best effort to produce more hogs.

A glance at the prices of pork on the leading markets in this country and you can plainly see that we are slaughtering, consuming at home, and exporting more pork than we are producing. Some will say that the feed is too high to feed to the hogs, but the price has more than doubled in the past few years and the farmer can make many of the waste feeds on the farm profitable by raising hogs. You will find many communities in this province where the number of hogs have decreased during the past year. What has this caused? Look at the market prices of pork and the question is answered. These prices are high because we need more pork now rather than any other time the farmer should be able to raise hogs profitably.

We can increase the amount of pork fats much more easily than we can increase the amount of vegetable or dairy fats. The people can not get along without fats as a food and because of this need, the farmer should endeavor to produce more fats by the quickest method. This method is by the increased hog production. Nearly all the farmers have a few dairy cows at least, and they are in an excellent position to raise pigs because of the skim-milk, buttermilk and other dairy products which can be

used by them in the making of valuable meat foods.

Pork always finds ready sale on all the markets because the packers have found many ways of placing it on the market in attractive forms with excellent keeping qualities. I doubt if you can find any other meat from which so many products are manufactured. A large percentage of all the meat and meat products manufactured in Canada is derived from the hogs. All buyers are very anxious to get hogs because their firm badly needs them in order to keep the markets supplied with their manufactured meat products.

The quickest and easiest way of augmenting the meat supply next to the raising of poultry is by raising hogs. The hog is the most important animal for the farmer to raise for meat and money. He requires less labor, less equipment, less capital, makes greater gains per one hundred pounds of food and reproduces himself faster and in greater numbers than any other domestic animal. As a consumer of by-products on the farm the hog has no rival. No other animal on the farm equals the hog in its fat-storing tendency. The most satisfactory meat for shipping on trains or wagons for long distances is pork. I think in many ways the farmer will find that the hog is one of his most profitable domestic animals that he is raising for the market on the farm.

GOOD HEALTH QUESTION BOX

By Andrew F. Currier, M.D.

Dr. Currier will answer all signed letters pertaining to Health. If your question is of general interest it will be answered through these columns; if not, it will be answered personally if stamped, addressed envelope is enclosed. Dr. Currier will not prescribe for individual cases or make diagnosis. Address Dr. Andrew F. Currier, care of Wilson Publishing Co., 73 Adelaide St. West, Toronto.

Medicines for Kidney Diseases.

If one has disease in the stomach or intestines he generally knows it and can localize it, but if he has disease in his kidneys, aside from aching and pains in the loins which are by no means sure indicators of kidney disease, there is nothing which can tell him, if he is without special information on such subjects, that these organs are diseased.

To be sure the urine is an important indication but it says little to the uninitiated.

Its appearance has comparatively little significance, in fact when it is as clear as spring water and irrefragable to the ordinary judgment it may have come from hopelessly diseased kidneys, while that which is discolored and suspicious to the uninitiated may have come from kidneys that are normal.

Many of the physical changes in the urine take place in the bladder hence if you are influenced by the appearance of the urine as to your choice of medicine you may be taking what may be harmful to the kidneys and be of no use to the bladder.

Albumen and casts are the most important things found in the urine but they cannot be seen or found except by chemical and microscopic examination.

Blood and pus may often be seen in the urine but how can you tell whether they came from the bladder or kidney, as they may come from either.

Gallons of urine are sometimes passed daily and are you going to tell that it indicates diabetes with sugar or diabetes without sugar, or cold, or disease of the nervous system, and how are you going to decide what remedy you should take?

When newspapers advertise Smith's Kidney Cure, Jones' Safe Remedy and Brown's Kidney Pills, they are offering you something that is harmless and worthless and a fraud, or something which may be good if you know how to use it, but upon which you are not able to decide by your unaided judgment.

There are many societies for the prevention of mischief and wrong doing, there should be one to prevent people from using kidney medicines they know nothing about.

It is possible to influence the kid-

neys by medicines for all the blood in the body passes through them every few minutes and it is the blood which carries medicinal substances taken by mouth and eliminated by the kidneys.

Two kidneys are usually provided for this purpose though many are able to get along with one while it remains in good condition.

Medicines will not replace a kidney which has been destroyed or removed, nor will they destroy kidney tissues which have been so injured they cannot filter out blood and waste matters from the blood.

Medicines can sometimes spur up inactive kidneys, check those which are doing too much, and coax along those which are diseased and imperfect but not too much so.

If this cannot be done, the wastes and poisons which the kidneys should eliminate, are retained and life is destroyed by them.

Water is one of the best kidney medicines, especially when combined with sodium, potassium, lithium or other minerals.

Mineral water is constantly used with advantage by those who have kidney disease.

Cold will stimulate the kidneys, so will blistering and cupping. Alcohol and digitalis, acting through the heart increase the blood flow through the kidneys and so increase the flow of urine.

Buchu, bear berry, parsley, broom, juniper and many other drugs will influence the kidneys and are often present in patent medicines.

In general it is unsafe for an individual to decide for himself whether his kidneys are diseased, and how they are diseased, still less therefore is it safe or prudent to decide upon the kind of medicine which would suit your case.

QUESTIONS AND ANSWERS.

Mrs. J. M. T.—Will bananas cause increase of weight? I wish to put on flesh.

Answer—Bananas, when fresh and ripe, form one of the most healthful and useful articles of food. They also have a greater food value than any other fruit because of the very large element of starch which they contain.

on right. Then you can forget all about lightning dangers and read your paper while the storm rages outside.

Keeping Biennial Vegetables for Seed. By the term "biennial" vegetables is meant one which takes two seasons to produce seed, writes the Dominion Horticulturist in a leaflet giving advice on the "Selection and Wintering of Biennial Vegetables for Seed," which can be had free from the Publications Branch, Department of Agriculture, Ottawa. The vegetables must be stored over the first winter and replanted for seed production the following spring. Some well known vegetables of this class are beets, cabbage, carrots, celery, parsnips, salsify and turnips. Seed from these can easily be grown in Canada if the vegetables to be so used are kept in good condition over the winter. Unless a rigid selection is made, each year, of specimens which are true to type, it will not be long before a larger proportion of the crop will not be true to type; hence great care should be taken to select well-shaped, medium-sized roots, typical of the variety of beets, carrots, parsnips, salsify and turnips, firm-headed cabbage true to type, firm stalked and disease-resistant plants of celery and firm shapely onion bulbs. If this is done and varieties are kept far enough from others so that they will not cross the crop, Canadian grown seed should compare favorably with imported seed in regard to purity, as it does in other characteristics.

The methods of wintering vegetables for seed will vary in different parts of Canada, but in most places it will be necessary to give them some protection. When possible, it is best to store them in a frost-proof cellar. But, if necessary, the vegetables may be stored outside, both in small and in large quantities, except in the case of onions, which must be kept dry, and stored in a cool place where there is little or no frost.

Moonlight

Moonlight can never be the same, Shadow and shine in mystic tress; In that soft glow, with bomb and flame They wrecked the wards of gentleness.

Borne on the evening's healing breath, With silver dabbled wings they came— Tears beyond tears, death beyond death; Moonlight can never be the same.

Rhubarb should not be pulled when the stalks become few and thin. Give the plants a mulching of manure, which will improve the supply for next year.

OPPORTUNITIES AND JEAN

"Whenever," Agatha declared, "I see that advertisement in the street-car signs that says, 'Opportunities are equal, I get so mad that I want to fight!' They aren't equal, and never were in all this world, and never will be so long as the world lasts. Why do people want to lie like that?"

"They certainly are not equal," Jean agreed. "Some people—like me—have so many more than others."

Agatha caught her breath. "O Jean, what a brute you must think me!" she cried. "I'm ashamed of myself clear through—you lying here all day with all that music shut out by your fingers. Only—that just proves my contention; you're the biggest illustration of it I know—you lying here, and Eloise Sharp, who never could learn to play in a thousand years—really play, with anything except her fingers, I mean—going to the conservatory!"

"Mith Jean! Mith Jean!"

The voice was full of excitement and importance—Tommy Bailey's voice by every token. A moment later Tommy himself appeared in the doorway, panting and breathless.

"Mith Jean, Pearl's broke a jar of huckleberry all over her head, and now she's what will take it out?"

"Dear me, Tommy, you'll have to build a fence about Pearl, won't you? But tell your mother not to worry—Just to pour boiling water over it. Wait a minute; I'll write it for you."

She picked up a pad and pencil from the table; also a couple of pink peppermints.

"There you are, Mr. Postman, and there's your postage stamp," she told him. "Sure you won't lose it?"

"Thure, I won't," said Tommy in tones that were somewhat blurred by the peppermint in his mouth.

"Did you—" Agatha began, but the telephone broke in. It was close beside Jean's hand, and she was answering at once.

"Oh, that's too bad! But don't worry, Rene dear; try a hot iron over blotting paper. If that doesn't work I'll tell you something else. But I think it will. It won't hurt the fabric in the least."

As she hung up the telephone, Agatha looked at her whimsically.

"Do you run an emergency station, Jean?"

"I am beginning to believe that I do," Jean responded. "Promise me to tell? Do you see that card index there? It has remedies for half the accidents under the sun. I get people to tell me valuable ones, or to try those I already know. It began with Tommy one morning when Pearl upset a bowl of soup. Pearl can furnish an accident a day, easily; in fact, she may be said to have started me on my career. It's such fun! You don't know how I'm getting acquainted down on Finney Street. The little club I used to have has extended all over the neighborhood."

"There are people," Agatha declared, "who would find opportunities in Sahara."

"Why, of course!" Jean agreed laughing.

GUNS IN HOSPITAL

Refitting Necessary After a Few Thousand Rounds Are Fired

Guns are comparatively short-lived. So great is the wear and tear on the modern gun of fairly large size that after a few hundred or few thousand rounds, as the case may be, it must be sent to the gun hospital at the rear, there to be refitted for further service.

While it is impossible to give definite figures that would apply to all kinds of guns, it is generally held that a field gun of 3-inch bore—such as the French "75" or the German "77"—is capable of firing between 5,000 and 6,000 rounds before it requires mechanical attention. But the life of a gun decreases rapidly with the increase of bore; so that in the case of a 6-inch gun, the life is perhaps 2,500 rounds, while for a 12-inch it is perhaps not greater than 250 rounds.

Of the very large guns, such as the German 17-inch howitzers used early in the war to reduce Liege and Antwerp, it was said at the time that the life was about 25 accurate shots and 25 additional, but somewhat faulty shots before each gun had to be refitted.

Among other things, the recoil mechanism—particularly the springs—of the guns has to be adjusted and renewed occasionally.

Farther Instructions.

Jacob Johnson was one of those persons who always think other people can't be left to attend to anything. They give so many directions that middle simply follows on their heels.

Well, Jacob was going on a business trip to Scotland, and he asked his brother to look after his pet parrot.

All the way north in the train he worried about the bird, and when he reached Edinburgh, rushed straight off to the post office to send a wire. "Don't forget to feed the parrot."

Early the next morning he was awakened by the boots at his hotel, who brought him his reply, also sent by telegraph:

"Have fed him, but he is hungry again. What shall I do now?"

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