

Soils and Crops

Address communications to Agronomist, 73 Adelaide St. West, Toronto

A Breeder's Problem.

There are many who do not believe very strongly in a careful, scientific breeding. There are many scrub cows that are enormous producers, both in quality and quantity of milk. Then there are many pure-bred cows that are poor producers. A case has come to our notice of a pure-bred cow which produced about twelve thousand pounds of milk in a year, mated with a sire whose dam produced eleven thousand pounds in a year, and the result was a daughter which was capable of producing less than six thousand pounds of milk in a year. It is because of occurrences like this that some dairy farmers look with some suspicion on scientific breeding of dairy cows.

The principle of atavism, which is breeding back to some primitive type, is well shown in such cases. This principle is frequently shown, not only in the breeding of cattle, but in the breeding of all other animals. In such cases the sire and dam that bred back should never again mate. It may be that the fault was not exclusively in either, but in the combination of blood. The intelligent breeder will see to it that such offspring is sent to the shambles.

The experienced breeder can usually see before the calf is two weeks old whether it will be suited to dairy purposes. The dairy animal will have a thin neck. There is a peculiar softness in the skin of a good dairy animal that all experienced animal breeders will quickly notice.

It is a fact that a great deal depends on the way calves are brought up. The best heifer calf may easily be spoiled by being fed fattening food, or by semi-starvation before it is a year old. Both of such procedures are injurious to the calf's digestion. If this is ruined in calfhood, the cow will be a poor eater, and therefore a poor producer, no matter what the sire and dam may have been.

It would also seem to go without saying that a great deal also depends on the way the mature animal is fed. Fine blooded animals require the best of care and treatment if they are to do to their best. If the owner is not able or prepared to give his cows the required treatment, or is too negligent to do so, his fine-blooded cows are certain to sink to a level with, if not below, that of the scrub cows. And so it often occurs that the best bred animals are often branded as cheats, only because their owners did not properly treat and sustain them.

How Our Silo Has Paid for Itself.

It is to me a great mystery that so many farmers are still without silos. Having been in use for a quarter of

a century, they are certainly beyond the experimental stage. They have brought success to agriculturists in every country. Most farmers who have found their silos unprofitable have not used them rightly, or have made some serious mistake in their construction.

Before building our silo we had only ten cows; yet, to provide ample forage for them, winter and summer, good years and bad, was sometimes a difficult job. Now we have 20 cows, and it is easier to provide feed for them than it was to provide for the other ten. Besides, our silage-fed cows are in better condition, look sleeker, and produce a higher grade of milk. For the last two years every cow has produced on the average of 400 pounds of butter per year. This butter, we have ascertained, has cost us ten cents a pound less to produce than butter coming from cows not fed silage.

Comparing figures with one of our neighbors who has no silo, we find that each of our cows cost us, per year, \$13 less to feed than his. We are also able to produce beef \$2 cheaper per 100 pounds than he can. Figuring at this rate, we came to the conclusion that our silo earned, last year, at least \$265. Moreover, we saved much grain feed by giving the silage, and also the horses, when not working. Indeed, I believe that our silo has saved enough to build a new one each year for the last four or five years.

Sometimes when the corn crop has been short we have made good silage from millet, clover, oats, or rye. We have fed this with success even in winter, but mostly we feed it during the latter part of summer, after the corn silage is fed out. In fall, again, we fill the silo with corn, and if the silage is not enough we refill it later with cornstalks taken from shocks in the field. The stalks, if soaked with water, can easily be cut, and make good silage.

We always try to have a supply of silage for summer. The cattle need a cool, succulent feed during hot weather, and what is better than corn silage? Some summers, also, the pastures dry up, and then silage comes in handy. Besides, high-priced pasture lands do not pay. Since we began feeding silage in summer, we have had only half as much pasture land as formerly, and our cows have milked as they never did before. A piece of land for raising silage crops will produce five or six times as much feed as will a pasture of equal size.

Every farmer having 10 cows or more needs a silo. Without one it is hard to do a profitable dairy business. A good silo will stand as long as any other building. We built ours seven years ago, and it is still in good condition.

The Dairy & Poultry

Many a dark and gloomy stable could be made cheerful and far more healthful to the cows and their caretakers by the expenditure of a very few dollars invested in a number of generous-sized windows suitably placed. Germs causing practically all of the dangerous diseases thrive in the dark, and direct sunlight is an effective germicide. Not only is sunlight health insurance for stock, but the cheer, comfort, and contentment that sunlight affords counts profitably in milk and meat production when the animals must spend the major part of every day indoors.

The same window opening properly screened in warm weather affords free circulation of air, while barring out flies. The objection sometimes raised against large windows as a means of losing much warmth by radiation at night can be readily met by using inside hinged wooden shutters, or spring-roller building-paper shades.

"Lord make it fit—
The work of our hands, that so we may
Lift up our eyes and dare to pray,
The work of our hands—establish
Thou it."

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If the pullets have not been treated for lice it will pay to give them the bluing treatment at once. One application will protect them until late in the spring and it may be only lice that are keeping down the egg yield.

The pullets that lay first will probably be the best breeders in the spring and it will pay to band such birds and use them exclusively in the breeding pens. Even though trap nests are not used the farmer will doubtless be in the poultry house often enough during December and January to spot most of the pullets which frequently go to the nests. If the farm flock is to be improved the work must start in the winter with careful selection and management of the pullets.

Do not lose eggs during the cold weather by allowing them to freeze in the nests. When eggs are worth six or seven cents each it does not take many of them to pay a farmer very well for his trip through the snow to the poultry house.

Smothering Out Quack Grass On My Farm.

It seems to me I have never seen the treatment for quack grass which I have been practicing for some time with gratifying results, mentioned in any farm paper. I do not use the spring-tooth or have observed that the farmers who do use it have plenty of quack grass.

For several years I have been following the practice of always going the same way over the quack with wheel or disk harrow, smoothing harrow, or cultivator where there is quack. Go the same way in the row when cultivating every time. The idea is to keep crowding it under and covering it. If one goes the opposite way in the row alternately, it just puts the quack in good growing condition.

I prefer the disks to be dull, so as to not cut the roots when disking, because the more you cut the roots the more quack you have. Sometimes quack is hard to pull, and at other times it pulls easily. One should watch and take advantage of it when it is weak.

Ivory-backed or ebony brushes can be quickly cleaned by rubbing dry bran into them and shaking them well to remove the grain afterwards. Lots of people dislike using water and ammonia, because they believe it injures the backs of the brushes.

THE CHEERFUL CHERUB

A cold has made me
lose my voice.
This really is a boon
to me
I'm in the limelight
now at last
And how I
love the
sympathy.
R.T. (Am)



Farm Meat for Farm Tables.

We have discovered in our neighborhood a plan for providing a generous and comparatively inexpensive meat supply for our tables. I know many who raise cattle but who rarely kill a beef because they feel they can't afford it. But they are among those who waste too much of what the packer is valuable by-product—namely, blood, entrails, feet, head, and horns.

Let me tell you how we manage. Our poultry and pork are home-grown, killed and prepared.

For our beef, mutton, and veal we aim to co-operate with at least three neighbors, and each one of this group of four families butchers one small young beef and one or more veals and fat sheep each year.

A suitable butchering shed was prepared where the work is conveniently done, and provision is made for saving all the blood and every part of the carcass. The bones below the knees and hocks, and the feet, are cleaned the same as hogs' feet, and boiled until the meat is perfectly tender and slips easily from the bones. The meat, is then seasoned with salt, pepper, a pinch of sage, a little flour, a minced onion, and a beaten egg stirred in. This is carefully mixed, then dropped by spoonfuls into hot fat and fried. Thus handled, what is too often wasted is to us about the best relished part of our beefs. The water is then evaporated from the oil in which the feet and leg bones were cooked by boiling, and the meat's foot oil resulting is strained and bottled for harness and leather dressing.

The heads of beef, sheep, and calf are carefully cut up with a cleaver on a block, and are used for head cheese, hash, and sausage. The tongue boiled and served cold is a titbit high in favor. So, too, with heart and liver—every bit becomes appetizing meat for our family.

Instead of the customary way of frying liver, I slice it thinly, season, roll in flour, and fry in boiling fat like doughnuts, putting in the oven to brown, and turning when one side is browned. It's then no longer beef liver.

The heart I stew until tender, then bake with a dressing made of bread crumbs, seasoned as for chicken and made rich with butter. This makes a dish fit for a king.

The tail goes into "ox-tail" soup. All bones are ground for the laying hens, and the best of the entrails become tripe or sausage casings. Of course, every ounce of tallow leaf and "rough" is rendered, the best going into a lard compound shortening, and the poorest for soap-making.

All of these too often wasted by-products supply us with practically half as much value in meat as do a quarter of the animals butchered, and the variety furnished is much appreciated.

In cold weather some of the choicest roasts and steaks can be kept for future eating, some of the remainder is corned and some dried.

According to our reckoning, this plan of farm meat supply we are now making use of furnishes us about three times as much choice meat as we would get for the same expenditure were it bought at retail prices, as practiced by many—L. A.

"Two things stand like stones. Kindness in your neighbor's trouble, courage in your own."

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Health Talks

By John B. Huber, A.M.M.D.

Address communications to 73 Adelaide St. West, Toronto

No Danger.

"In our family of five there are three boys and two girls. All of us are fine and strapping and have the color of apples in our cheeks. But here is the problem. My father, born in Ireland, was a fine, strong man who came over here the picture of health. When we all grew up to from 11 to 18 he contracted a cold resulting in his death from consumption. Does that doom all of us? He was very careful and since he died, three years ago, we are nervous. None of us so far as I know, ever had a cold; but does the first sign of a cold doom us to that disease? I have heard so much about the disease being hereditary that it is in my mind all the time. Please uplift a and imagination that I have upon myself."

Answer—My good friend, consumption is in the vast majority of cases neither a family nor a hereditary disease. It is in most cases acquired after birth. It has been learned beyond peradventure that the parent very rarely indeed transmits to the offspring the germ of tuberculosis (consumption), though a tendency to the disease (that is, a weakness of the body by which it may become fruitful soil for the implantation, and the growth of the weed-like germ) may be transmitted.

I am sorry to say that one of the races which are prone to such tendency is that of your forebears. If, however, no one of your family has shown any sign of the disease since your good father's death three years ago, you may be sure he has not transmitted to any one of you the disease itself. Tuberculosis has often been called a house disease for the reason that any careless sufferer may emit in his sputum the germs which others may inhale. But the germ of this disease cannot live and be dangerous for more than a few days outside any living body. Therefore, three years after, you need have no fear. Banish fear from your mind. For herein lies a potent predisposition to disease. Live the hygienic life, watch out (but not to any morbid degree) for the early signs of tuberculosis, go to a good doctor at the first sign of trouble, and there is no reason why you should not

all, the five of you, boys and girls, live to fourscore and more.

Questions and Answers.

My little grandchild aged 3 1/2 years has had epileptic fits occasionally for the last year or two and is extremely nervous all the time. When she was born she was injured on the back of the head by the instruments used by the doctor. Do you think this injury has caused the fits? Please let me know if these fits can be cured, as the child is remarkably bright, perfectly healthy and normal in every way with the exception of being nervous.

Answer—Are you sure the child was injured at birth? In some cases of childhood instruments have to be used if the mother's life is to be saved. People, I am sorry to say, sometimes unfairly attribute maladies to the procedures which doctors may institute. In any event, epilepsy may be due to an injury within the skull and in some such cases operation has resulted in its cure. In most cases of the disease, however, the cure is difficult.

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A Country Church That "Came Back."

In Platte County, Missouri, lives a farmer who has worked all his life with the idea of retiring in his old age and buying a home in Kansas City. He has reached the point at which this ambition may be easily realized but for one obstacle—his young son and daughter firmly and vigorously refuse to give their consent!

They refuse because—what do you think?—they are afraid the city would be dull! They are very sure, at any rate, that it wouldn't give them the satisfying social life they enjoy in their home neighborhood.

Their mother is partly responsible for the attitude of the children who won't let Dad leave the country. She was one of seventeen mothers who met one day to make plans for building a social centre annex to Second Creek Church near Beresford, the oldest country church in the county. The seventeen had observed the waning influence and the gradual abandonment of many rural churches, and especially their failure to touch the lives of the growing boys and girls. They decided that Second Creek Church should not succumb to creeping paralysis, but should "come back" to the position of vitality and helpfulness it held in pioneer times.

Plans were made for a social centre annex to the church, consisting of an up-to-date kitchen and a community dining-room and auditorium. Modern plumbing was to be installed, with lavatories, drinking fountains, and inside toilets. A hot-air furnace was to replace the stoves.

These improvements would cost \$1,000. The figures were low because the farmers in the neighborhood had offered to contribute labor and materials. Nevertheless, the raising of \$1,000 was a task not to be lightly accomplished by a handful of busy country women in these days of scarcity of help.

"It will take a long time to raise \$1,000," suggested one of the workers. "Our children would grow up in the time it would take for that money to trickle in from socials and bazaars. I move that we look on this as a business proposition and go at it just as men would. Who ever heard of men waiting for public improvements until they had raised the money by pie suppers? I propose that we borrow \$1,000 at the bank and give our personal notes for it."

"If we get in debt, we'll have to get out. Our good names will be at stake, and we'll work like beavers to make up the payments. If we get a loan we can start building right away. We can have our improvements and be getting the good of them while we're paying."

Everybody gasped. But the more the proposal was threshed over the more sensible it seemed. The neighborhood needed social enlivening at once.

The women adjourned to put the proposal to the president of a bank in the nearest village. They got the loan. That was in 1917. The annex, completed in a few weeks, was equipped with a kitchen containing a gas stove, a cooking range, hot and cold running water, and every convenience for preparing and serving meals. The large dining hall is also used for a Sunday-school room, and as an auditorium for lectures, farmers' meetings, concerts, amateur theatricals, community dinners, and Christmas trees.

"The big thing about modernizing a country church is making up your mind to do it," said Mrs. Joe Couch of Westfall, Missouri, who is a leader in the social activities of the enlarged church. "Once you've decided to go ahead you'll get all kinds of co-operation. We couldn't have improved our church but for the help of our husbands, brothers, fathers, and sons."

"They contributed teams, labor, and material to the value of several hundred dollars. People who had never taken much interest in the church added their bit. The building of the annex stimulated the spirit of co-operation and teamwork, not only in the church but throughout the neighborhood. I think any band of church women could do what we did."

The annex has more than fulfilled expectations in supplying the community with social life. To the dinners given in the new dining hall, people come from a radius of twenty miles. They arrive by motor car, by mule team, and on foot. The young husband and wife who have just moved into the neighborhood shake hands with scores of new friends. Lifelong friends meet and talk across the table. The young people sit around in congenial groups.

The Ladies' Aid has met payments on the loan easily. The women got out a cookbook which they sold throughout the country to raise money. They have had entertainments, bazaars, and sales of food, garments, and fancy needlework. One day of each month they meet at the church to sew on garments which are sold for the church fund. Meanwhile there is "something doing"—some social or educational gathering—at the annex every week. And that is why the boy and girl in the home of at least one farmer in Platte County, Missouri, are growing up happily and wholesomely on the farm, and not in the city.

Time and tide wait for no man, but time and care applied to farm tasks pay any man.