

# EFFICIENT FARMING

## MY EXPERIENCE WITH TILE.

A few seasons ago I handled a farm where the land was of good quality and reasonably fertile. No man will be able to produce maximum crops on that farm until the owner is willing to put a few hundred dollars in the farm in the way of proper drainage. The owner is cheating himself out of the full benefit of his farm year after year, while a tiling system would pay for itself in one or two seasons. No one can get anything out of his farm if he isn't willing to put something in.

Halfway methods in tile drainage will get halfway results. It does not cost any more in proportion to tile the farm thoroughly at one time. Proper drainage keeps the soil loose and conserves fertility, makes it possible to get the ground in shape for seeding at the proper time, causes it to warm up earlier in the spring, thus lessening the danger of early and late late frosts, and stimulates plant growth. These advantages will be realized each season. When the season is cold and backward during the early spring, I have found the advantage of tile drainage even more noticeable.

With our rather heavy black level soil, which has a tendency to hold water for long periods during wet weather, we have to drain at least every two rods to get uniform results. On more rolling or gravelly land it is not necessary to drain quite this close.

Tile should be deep enough that it will not be disturbed by the deepest plowing. It is better if the drains are sufficient fall to carry the water rapidly, as they will drain the soil quicker, and the force of the water

will carry away sediment, keeping the tile clean. Owing to too much or too little fall it is sometimes necessary to lay the head of the drain rather shallow. It is not always possible to get below the frost line. For this reason we have found cement tile preferable to clay, despite the slight extra cost, as they are not injured by the action of frost.

The old method of digging the trench and leveling and laying tile was a slow, back-breaking, and expensive task when elbow grease was the motive power used to get the work done. We find that a machine ditcher does as good or better work, and is less expensive and less disagreeable than the old method. The machine can work better in dry weather than in wet, as the leveling is done by survey instead of by water. A competent operator should be in charge of the machine, and the owner of the farm should inspect frequently. A very slight mistake may make an entire drain worthless.

What is the use of paying high taxes and making other improvements on land that will not produce good crops owing to lack of drainage? This is about the only improvement on the farm that is permanent. We have to paint, build fences, buy new machinery, build new buildings, restore the fertility of the soil, and do other things of like nature several times in the course of a natural lifetime. The farm, once properly drained, is drained to stay, and the work that has been done goes on making money for its owner day and night, and will do so for future generations with little attention, if the work is done properly.—D. P.

## Artificial Incubating.

S. W. Knipe

One shall not make any effort in this article to give instructions how to operate an incubator. I will rather devote it to a few suggestions as to what you ought not to do.

It is not a wise policy to wait until a few days before you intend to start hatching before ordering your incubator. The dealer may not have the size you desire in stock.

While a second-hand incubator is not recommended, nevertheless there are many purchased each season on account of the lower price. If you do buy a used incubator thoroughly test it before using. If any parts are missing procure them, but probably one of the greatest drawbacks to buying a second-hand incubator is the fact that rarely are they accompanied by the book of manufacturer's instructions. These instructions usually can be obtained at a very small cost from the maker and in no case should one attempt to operate without them. The latter also applies to the purchaser of a new incubator. Do not attempt to put it together any other way than instructions indicate. Do not experiment. The manufacturer has already done that. Because you have used one make of a machine don't think instructions with another make can be dispensed with. It is absolutely no use to expect good results from the best incubator made if you put it in a room where windows have been sealed tight in one way or another to keep out the winter winds and frost. The incubator lamp uses a great quantity of oxygen and gives off a volume of poisonous fumes, which are sure to cause trouble unless reduced to minimum by proper ventilation.

## Selection of Seed Improvement.

Different selections of seed of various classes of grain have been carefully tested at the Ontario Agricultural College for from six to nine years. The average results show that even one year's selection of seed grain has a marked influence on the resulting crop. In every instance, the large plump seed gave a greater yield of grain per acre than medium sized, small plump, shrunken or broken seed. In the average of the six classes of grain, the large plump surpassed the small plump in yield of grain per acre by 19 per cent., and in the average of the three classes of grain, the plump seed gave a yield over the shrunken seed of 20 per cent. It should be understood that equal numbers of seed were used in this experiment. The results throughout show that a large plump seed will produce a larger, more vigorous and more productive plant than is produced from a small plump or from a shrunken seed.

## Plow Horses.

Plow horses, heavy, white, slow things. Prepare the earth to meet its springs. Loud breathing, sweaty, ponderous, true. They do the work they're chosen to. Unconsciously they pass in high ground, painted upon the sky. Forelock and fetlock, roached tall, strong, beautifully matched, they strain. Great shaper that all the landscape.

## Flowing Horses.

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## Sheep Notes

A great deal of success in raising early lambs lies with the care and feeding of the ewes during the three just previous to and just after the lambs are born. A sheep is not a difficult animal to raise or feed when the proper management is followed. In fact, I know of no animal that requires so little attention for the net return received for both the feed and labor put into it.

One practice we have always tried to follow with the breeding ewes was to provide them with stalk pasture all through the winter. They do not do so well when kept housed all winter. They require plenty of exercise in the open to properly develop the fetus, but we always provide shelter for them during rainy and snowy weather or extremely severe cold. That is just as essential as keeping them out in the open in good weather, for if the fleeces get very wet and they are housed they take very heavy losses from which they do not quickly recover.

If the stalk pasture is good they require little else except plenty of salt and perhaps some clover hay. We feed very little if any corn, because it produces excessive fat, limiting any grain feeding to oats. Ewes in thin flesh, however, need some corn or sufficient other grain to put them in good flesh, and plenty of clover hay. Sheep oats is an excellent winter feed for sheep.

Two or three weeks before the lambs are due to arrive we like to give a good feed of oats to the ewes each day so that they will provide plenty of milk for the new-born lambs which, if they happen to be twins or triplets, will demand a great deal of milk to start them off right. We have never found any feed that would answer this purpose so well as oats, because of their combined bulkiness and protein content. Then they also help to develop a strong lamb which will require little close attention after it has received its fifth or sixth meal. I would rather feed corn after the lambs arrive than before, though if too much is fed it has a tendency to make them lose their wool.

## A Protected Ax Handle.

How many of us have had the experience of breaking or splitting our ax handle when chopping a limb or splitting a block of wood?

Here is a plan I use; and I find that it lengthens the life of a handle several times. Get a spool of copper wire, twenty-gauge preferably, and wind eight or ten inches of the handle next to the ax tightly with it, as that is where most ax handles are broken.

Drive a small nail in the handle, the distance you wish to wrap it to, a depth of half an inch, then withdraw the nail and cut off half an inch of the wire. Now put the end of the wire in the nail hole and drive the piece of nail in flush with the handle.

Wrap the wire tight and close toward the ax, first having made a hole clear through the handle close to the ax. When the wire reaches the hole cut it off long enough to put the end through the hole.

## Live Stock Sales and Prices.

From January 1 to 26 inclusive the sales of cattle at the five leading markets of the country, according to Dominion Live Branch reports, were 47,207 compared with 46,416 in the same period last year. Of calves 7,362 compared with 6,827, of hogs 88,481 compared with 91,043, and of sheep 20,985 compared with 25,662. A decrease is indicated in every instance excepting of sales of cattle and calves, of which there is a slight increase. Of hogs and sheep there is a noticeable decrease both in sales and billings through. Top prices for butcher steers at Toronto and Montreal were 50c better, and calves 50c and a dollar up, for the week ending January 24 this year compared with the corresponding date last year. Select bacon hogs showed an improvement over the previous week. Lambs were the same at all markets excepting at Toronto, where there was a rise of \$1.50.

## Keeping the Oil Can Clean.

In neighbor Brown's farm shop an oil can sits on the bench, ever ready to provide oil for a dry bearing, a rusty nut or a shiny plowshare. Ordinarily the can would leave a telltale ring of oil on the bench where the lubricant that ran down the spout would creep over the sides.

But not this one. A tin washer, the kind used for putting on prepared roofing, had been drilled out to fit the spout. The slight depression on the upper side collects whatever oil spills, and when the can is again used it runs out.

## Sewing Grain Sacks.

A bodkin or needle suitable for use with string or twine can be readily made from one of the openers that are used to open tin containers. The wire opened is straightened out and the ends rounded up with a file or on the grindstone that they may pass freely through the open weave of the sacking. This simple modification is so easy that a few of the openers can be put aside until such time as the bodkins are needed, when one or more may be straightened up and pointed for use. This is a simple detail. However, it is most necessary when sewing the sacks, and is a hint worth remembering for this need.

## Live Stock Sales in January.

At the principal markets in Canada, reported by the market division of the Dominion Live Stock Branch, the volume of business transacted during January compared favorably with that of the corresponding month of last year. The total sales of cattle at Toronto, Montreal, Winnipeg, Calgary, and Edmonton were 69,407 against 57,873, of calves 9,978 against 8,627, of hogs 119,393 against 111,879, and of sheep 24,439 against 30,719. Generally prices on cattle and lambs were about even with those of January, 1923, while hogs were somewhat lower.

## Dave's Hired Men

BY J. E. RUSSELL.

"How is it, Dave, that you never seem to have any trouble with your hired men?" inquired a city cousin who had driven out to the farm for the day. "There is your neighbor, Tom, down the road. I was chatting with him this morning, and he was in a terrible grouch about the hired help question. He says he has had four different men this season. They stay a month or so and off they go. You've had the same man for two or three years, and as long as I have known you, I've never heard you complain about your help. How do you explain it?"

"Why, I don't know," said Dave. "Of course there are all sorts of hired men. You spoke of my neighbor. He has had men around for weeks that I wouldn't have let them sleep in a bed in my home unless their clothes had been fumigated, and they had had a bath. I've always been particular about the men I hired. I like best to get some young fellow I've known for years and his folks before him. I don't want any chap around who hasn't good principles, not only because of my children, but for the sake of the cows and pigs. I saw one of Tom's hired men pounding a cow with a fork handle a while ago. That fellow couldn't come here."

"How about wages?" inquired his cousin.

"Well, answered Dave, "wages are pretty high, of course, but I've always calculated to pay my men good wages. When it comes to a show-down, what is \$5 or \$10 a month extra on a hired man's wages? If a man thinks he is underpaid, he can easily shirk enough to more than equal the extra money he thinks he ought to have. It is a great thing to have a hired man feel he is doing well, and that he has a good place. He'll be extra careful not to do anything which might make him lose his job."

"I notice that you take your hired man in as one of the family," remarked the cousin.

"Yes, I do," resumed Dave. "I remember that when I was eighteen I

## The Sunday School Lesson

MARCH 9

### The Reign of Saul, I Sam. Chs. 1-7. Golden Text.—I Sam. 15: 22.

Continuation of the story.—To Samuel as to Gideon, Jehovah was not satisfied with the outward form, but the Lord, not the outward form, but the inward spirit of worship, God desired. They had not the (great) faith of Gideon or of Samuel. They wanted a king whom they could see, a king such as other nations had "that our king may judge us," they said, "and go out before us, and fight our battles." There was practical wisdom in what they asked, but to Samuel it seemed at first a denial of the sovereignty of God.

He found for them a warrior king after their own heart in Saul, a young man of Benjamin, tall and good to look at, whose father was known as a "mighty man of valor." Two stories are told of the choice of Saul, I Sam. chs. 9 and 10.

Saul came to the throne as the first king of Israel about, or shortly after, the middle of the eleventh century before Christ. Much of Saul's reign was occupied with wars against the Philistines, and he must be thought of as a brave soldier, devoted to his country's welfare, and as the creator and leader of a strong and well-disciplined army. But his mind became clouded by suspicion and jealousy. He refused, or disregarded the counsels of Samuel, became subject to fits of dark melancholy, and was guilty of a serious crime against the priests of the sanctuary. Samuel, who had chosen him under the guiding providence of God, now by the same authority declared his rejection, and that God would put another in his place. For the brighter and better feature of his character one should turn to David's noble and touching elegy in the first chapter of the Second Book of Samuel.

15: 13. Samuel came to Saul. Urged by the prophet, Saul had made an expedition against the Amalekites, a wandering tribe of Arabs whose home was in the wilderness south and southwest of Palestine. They had disrupted the passage of the Israelites and had been defeated by them in the days of Moses, and ever since they had harassed and robbed the people of the south. Samuel had given the stern command, in the Lord's name, utterly to destroy both them and their possessions, but Saul, disregarding the prophet's word, brought back the king of Amalek as a captive, and brought the best of his cattle and sheep. Now he greets Samuel with effusive friendliness, hoping to conciliate him, and declares, "I have performed the commandment of the Lord." It is quite likely that what Saul said was true, and that the sparing of the best of the sheep and of the oxen was popular both with the army and the people. A great sacrificial feast upon his triumphal return would have pleased the people very much, and the king's vanity would be gratified in displaying the captive king.

Vs. 16-19. What the Lord hath said. To Samuel, the serious side of the matter was in Saul's refusal to be governed by the word of God which he, as God's prophet, had spoken. For though Saul was king in Israel, Samuel held that he had received his kingship from Jehovah, and was subject always to Jehovah's command.

Vs. 20-23. Hath the Lord as great delight. Samuel sweeps aside the king's dimly excuses, and utters here one of the great words of prophecy.

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## Flickering Lanterns.

It happens frequently that even a new lantern will begin to flicker after it has been burning for a short time, making a noise like the exhaust on a motor-boat. Some people are very much alarmed at this and imagine that the lantern is about to explode.

There is nothing dangerous in the flickering of a lantern. This is caused by water in the oil fuel, which seeps into the wick and prevents a perfect combustion. To remedy this the oil fuel should be emptied and wiped dry with a rag or waste on the end of a wire. The font should then be refilled with fresh kerosene, and the wick replaced with a new one.

## Frozen Ground Pipes.

To thaw water pipes in frozen earth, dig off a few inches of dirt and pour in unslaked lime. Pour over some water and cover immediately with canvas or bricks or stone to keep out the wind. In the morning the ground will be thawed for two feet.

## The Dairy

To get the maximum production it will be necessary to provide feeding-stuffs that have a high per cent. of protein. I have found that by grinding barley, oats and wheat, equal parts by weight, and feeding one pound of grain per day for every four pounds of milk produced, I get a good liberal flow of milk and by feeding all the alfalfa hay and the cows will eat the ration is a fairly well balanced one.

However, to make the cows produce to their capacity one can undoubtedly get an increased yield by adding two pounds of cottonseed or oil meal per day. One can stimulate many cows to still further increased production by feeding more of the high concentration, cottonseed or oil meal. But this increase should be carefully done by adding no more than a half-pound extra per day and carefully watching each cow to make sure that the concentration are not bringing on an unfavorable reaction.

## True Leadership Will Show Personal Advantages to the Welfare.

Being the whole cheese of a community is too often a hard task for the community.

## Horses and cows have much to do better work if they are kept clean.

All animals need plenty of sunshine, clean water and good food. The road leading to a permanent scheme of orderly marketing will sooner or later pass through the field of orderly production.

## It is quite as important to ventilate the brain with a little good reading as with some man of noble qualities.

It is to ventilate the dairy farm.

## RED TAIL and the O

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Canada in 1922, 1923 and 1924. In the year of 1923, 1924 and 1925.

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An abundant supply of good, clean, soft, white, and comfortable clothing for all the girls in the family. The quantity is just what you need. The price is just what you can afford. The quality is just what you want.

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