Efficient Farming

SAVE THE FODDER.

Attempts have been made to control or direct the fermentative action within the silo. The lactic acid bacteria, *bacillus lactis acidi*, has long been known to be beneficial in silage making, and its product, lactic acid, is found to the extent of one per cent. in well made silage. Experience has demonstrated that the addition of *bacillus lactis acidi* in quantity to the fodder as the silos were being filled gave good results, particularly so when the fodder was past the best stage for making high grade silage. The addition of the *bacillus lactis acidi* in quantity to the more or less spoiled fodder provides an active agent to check and override the other bacteria present and thereby control the fermentative process and bring the silage mass to a fairly uniform condition with lactic acid predominant in the silage. This addition of lactic acid culture to the fodder at the time of silo filling is easily accomplished by securing a small quantity of pure culture for lactic acid from a creamery as a beginning. The pure culture is placed in a three gallon can of clean skim milk and allowed to ripen for three days. This can be added to more skim milk and a quantity of the culture developed that there may be at least one gallon for each ton of fodder that goes into the silo. This skim milk culture carrying vast numbers of *bacillus lactis acidi* is sprinkled over the cut fodder as the silo filling proceeds.

If the corn is in prime condition for silage making at the time of ensiling, nothing is to be gained by adding culture. However, its use is strongly advised if the corn or other fodder is a bit off in condition, due to damage through unseasonable weather, delays, etc.

MY METHOD OF SELECTING SEED CORN.

The most satisfactory method of selecting seed corn I have found is to choose the corn as it is being gathered in the field. I place the seed ears in a box on the side of the wagon, and thus keep them separate from the other corn. The main things I consider in choosing an ear for seed are: Soundness, length, diameter, depth of kernel, color, and conformity to type.

Ears should be uniformly large and well proportioned. The color should be uniform, and the indentation typical of the variety. The cob should be as small as possible and still permit the maximum growth of the kernel. Corn for seed should not be chosen from stalks advantageously located. I select about twice as many ears as are needed for planting. It requires about 15 ears to plant an acre.

That the filling-out of the tips and butts does not deserve as much attention as is commonly given from the standpoint of yield has been shown in many experiments. In one series of experiments, covering a period of five years—from 1905 to 1909, inclusive—well-filled tips yielded 51.65 bushels an acre; medium-filled butts, well rounded, yielded 50.66 bushels an acre, partially rounded, 50.96 bushels; not rounded, or otherwise poor, 51.04 bushels. There is a tendency, in selecting tips and butts, to reduce the size of the ear.

The corn for seed should be stored in such a manner that it permits of free circulation of air around the ears, so as to dry them quickly and prevent molding. If they are not well dried before being subjected to freezing temperatures, the germ will be injured. A vacant room in the house that allows free circulation of air is an ideal place to store seed corn, but an attic, if well ventilated, will serve the purpose just as well. Seed houses have regular drying rooms or sheds, but for the average farmer this is not practical.

Seed corn should be tested twice if possible, one test being made in the winter and the other in the spring just before planting. In the winter test I select one kernel from each ear, and germinate. In the spring I make a more accurate test, about six kernels being selected from different rows and different parts of each ear. If fewer than five of the six kernels germinate, I do not use the ear for seed.—M. Baird.

POTATO HARVEST.

Late blight affects the tuber of the potato as well as the vine, and the disease lives over from year to year in the seed. When harvesting the potato crop cull out all tubers with dark sunken areas on the surface and a brownish discoloration of the flesh.

Black Scurf—This fungus develops small black specks on the surface of the tuber. Such should not be stored for seed.

Stem End Rot—This trouble is evidenced by a decayed and sunken area at the stem end of the tuber. When a cross section is made near the stem end a brownish ring is usually plainly visible.

Tuber Injury—Care should be taken to avoid bruising the tubers while harvesting. Roughly handled potatoes usually have a high percentage of dry rot.

Sheep Notes

Before the flock enter winter quarters in the fall they should all receive a thorough dipping. A bright, warm day in October should be chosen and the dipping done in the morning so the wool will have time to dry before night. It is safe to say that fall dipping of the flock should never be neglected. Even in those flocks that are supposed to be clean it will pay. In case any sheep are to be added to the flock they should always be dipped before being taken in with those that are already clean.

There are several different kinds of sheep dip on the market, any one of which will give satisfactory results provided directions are carefully followed. The water to be used for dipping should be warmed and the mixture should be stirred frequently to prevent the heavier dip settling to the bottom. The sheep should remain in the dip for approximately two minutes to allow the wool and skin to become thoroughly saturated.

Unless the flock is a very large one it will not be necessary to build an expensive dipping tank. A large trough or barrel may answer if nothing else is at hand. However, a very satisfactory tank may be build of ordinary tongued and grooved matched lumber. Ordinary lumber may be used and have the inside lined with galvanized iron. Strong galvanized iron alone properly constructed by a tinsmith will make a good vat, although possibly rather expensive.

Marketing the Potato Crop.

The potato grower should cater to the wishes of the most particular and exacting customers. He should furnish a choice product in a most attractive form and should carefully study the demands of the market he wishes to serve. For the best prices the potatoes should be uniform, sound, smooth and of good table quality, whether selected by the pound, the basket, the bushel, the bag, the barrel or the car load. The commercial potato grower should not be confined to the local market, but should be in a position to put his potatoes on the best market available either through his own efforts or through the medium of a co-operative association. It sometimes occurs that of the price paid by the consumer for a bushel of potatoes about two-thirds are required to defray the cost of transportation and of distribution, and one-third is left for the grower. This is not as it should be. Undoubtedly one of the best remedies for such a condition of affairs is co-operation on the part of the growers themselves.

Surely the man without a silo has more reason to be concerned about the weather these days than has he who possesses one.

Plant Bulbs Now.

Have you forgotten how you envied your neighbor's bed of tulips last spring? And how you vowed you would have some on your lawn next spring?

If you really meant what you said, now is the time to get busy, for spring flowering bulbs must be planted in the fall—any time now, until the ground freezes.

October is an ideal time for planting, for planting at that time allows the bulbs to become established and make some good root growth before freezing weather puts the bulbs to sleep.

First thing to consider is drainage. The bed must be in a well-drained place. Fertilizer is another requisite. Put on a good application of bone meal—an inch deep is none too heavy—and spade into the soil. Mix it well with the soil.

Tulips, hyacinths and narcissus should be planted about four inches deep, and from five to seven inches apart. Anemones should be one inch deep and from four to six inches apart.

Be sure that bulbs of the same kind are all set at the same depth, so that there will be a uniform development in the spring, thus making sure that they will all flower at the same time. It is advisable to mulch the beds with straw, leaves, or strawy manure after the ground freezes. This keeps the frost in the ground and prevents the alternate freezing and thawing which causes the soil to heave, thus injuring the roots. This mulch should be removed early in the spring before the bulbs start into growth.

The Darwin tulips are the finest of all tulips. The Cottage, Breeder and Parrot types should be planted more widely.

Dutch hyacinths are the ones to plant out of doors. Roman hyacinths are seldom used except under glass. Singles are generally more satisfactory than doubles.

Among the Narcissi there are several types which may be used. The Daffodils with large, medium, and short trumpets, come in the yellows, white, and colors; the singles are better than the doubles, the Jonquils, the Poetaz, and the Poeticus types. The Polyanthus type, which includes the Paper White and the Shineses Sacred Lily, is not hardy, and so should not be used out of doors.—E. A. K.

The Japanese are developing an appetite for beef. The home supply being insufficient, importers are securing additional supplies from Canada.

To prevent sorehead (chicken-pox) I give once a week for each 100 fowls, one-fourth pound of sulphur thoroughly mixed with greasy bread, and three days after that I give the same measure of Epsom salts. I feed the sulphur in the coops at night. I begin this treatment July 1 and continue until October.—Mrs. M. A.

The Sunday School Lesson

OCTOBER 19

The Parable of the Sower, Mark 4: 1-20. Golden Text—The sower soweth the word.—Mark 4:14.

I. THE SOWER AND THE SEED, 1-3, 10-14.

II. THE SEED AND THE SOIL, 4-9, 15-20.

INTRODUCTION—When Jesus first entered on his work in Galilee, it was possible to hope that the nation as a whole would accept the divine message and lay hold by repentance of the kingdom of God. Jesus knew himself to be divinely sent and commissioned to lead the nation into the kingdom, and everywhere he sought to create a penitent and believing attitude on the part of the people. But while he thus "broadcasted" everywhere the word of the kingdom, it was not everywhere that he met with a response. The Galileans did not all believe, and as time went on, the religious authorities took up an attitude of implacable hostility. The minds of the many were either superficial or steeped in worldly conceptions of the kingdom, and hence the preaching of Jesus bore little or no fruit among them.

But on the other hand we see the gradual formation round Jesus, of a new believing society of disciples, who are dearer to Jesus than home and kindred. These believing ones have received the "mystery" of the kingdom.

This now is the stage marked by the teaching of the parable of the sower. We might interpret the teaching of this and the other parables in this chapter as follows: Though many hearers turn away, and refuse to believe the message of Jesus, this does not mean that the message is not divine, or that the kingdom will not come as Jesus has said. Indeed, on the contrary, God's own wisdom is revealed in the selective process by which only the few—those who, like the disciples, are spiritually minded—have laid hold of the message. For this is what happens wherever seed is sown. Much of the seed that the farmer scatters yields no return at all. What Jesus therefore says in these parables of the kingdom is that disciples are not to be discouraged. The seed is sown, and the harvest will surely come.

We should never be discouraged. What a fine lesson to lay to heart when we think of the difficulties which lie in the way of the gospel, and of the Christianizing of the world.

I. THE SOWER AND THE SEED, 1-3, 10-14.

V. 1. The crowding on the shore makes it necessary for Jesus to preach from a boat, which for this purpose is moored a few yards out on the water. From this position the preacher can be seen as well as heard.

V. 2. Jesus addressing the multitude, used parables, that is, comparisons or illustrations of divine laws and truths drawn from familiar features of ordinary every day life.

V. 3. The lesson is in short, as we see by v. 14, that Jesus' message of the kingdom is the seed from which the actualized life of the kingdom is to proceed. But, like a sower, Jesus needs a soil adapted to the message, and not all hearts are of this description.

II. THE SEED AND THE SOIL, 4-9, 15-20.

V. 4. There are hearts which are like the roadway or path forming the margin of fields. Seed sown there is immediately picked up by birds. If a heart is hard or secular, if like the common roadway, it is a mere thoroughfare for worldly thoughts and purposes, the word of the Kingdom has not a chance of taking root.

Vs. 5, 6. There are hearts which are like "stony,"—that is, shallow soil. The seed only gets in a little way, and as such shallow soil heats too quickly in the sun, the plant which at first sprouts rapidly, soon withers for want of moisture. Jesus is here speaking of enthusiastic and sensational, but shallow hearers who ardently welcome his first announcements, but are not prepared to give deep and attentive consideration to his ultimate purposes.

V. 7. There are hearts of which the soil is generous enough, but full of thorns and weeds. The seed of the divine word gets in, but its growth is checked by the upgrowth of coarse desires. Jesus is here speaking of hearers whose affections are too much engaged by worldly pursuits and ambitions, for example the love of money which makes them incapable of truly serving and loving God, or whose minds are perverted by worldly conceptions of the kingdom.

V. 8. But there are honest and good hearts, like rich and clean soil, where the message meets with genuine faith and love, and where a harvest of obedience is produced. Jesus is thinking here of his own disciples and of other believers whose hearts God has opened to receive the truth. We will find a description of such souls in the Beatitudes, in Matthew 5:3-9.

Vs. 10, 11. Jesus now explains the secret of his teaching in parables. The disciples have had the "mystery" of the kingdom, that is, its spiritual character, revealed to them by God, but the masses of men are still at the stage where they require symbols and parables of divine things.

THE SOIL OF PALESTINE.

Two facts should be remembered about Palestine:

1. It is part of the Mediterranean world. There you have two seasons,—a rainy winter and a long, dry summer. What plants will grow in such a climate? Only two kinds: either plants that send their roots deep into the earth and expose little leafage to the scorching winds of summer, or plants that have a life of only a few months and so do not need to live through the drought. Of the latter sort are wheat and barley, and less important cereals. They are sown in the autumn, grow during the winter and ripen early in the dry season. Of the hardy perennials, the most important are the grape vine and the olive tree. The olive in particular is fitted by its root system and its scanty foliage to withstand the drought. The staple products of all the Mediterranean world were "corn and wine and oil." (See Ps. 105:15.)

2. The other important fact is that Palestine is part of the Arabian desert. In fact more of Palestine is desert than cultivated land,—bare gravelly moors, with here and there a little arable valley; often the soil is not more than half an inch deep, and everywhere there are stony donkey-paths. Almost anywhere in the uplands of Palestine you find the four soils of the parable.

Check Up on Your Sprays.

There is no better time than during the harvest season to get an accurate estimate of how successful one has been in his spraying campaign.

Did you reach the top of your trees in spraying; or do you find a lot of scabby and wormy apples there? The very best apples always grow in the tops of the trees, provided that we keep them clean.

If they are diseased it means that the spray didn't reach them. Why didn't it?

Do you find a lot of injury from codling moth? A distressing experience, but all too common if one does not spray often enough or thoroughly enough.

Are there any apples with San Jose scale on them? You can check up very accurately indeed on the prevalence of scale in the orchard since it will be found on the apples if there is any on the trees, and you can determine which trees or which blocks of orchard should be sprayed next winter or spring for scale.

As the scale is on the increase again in most parts of the country, it is wise to pay special attention to it this autumn.

Do you find scoty blotch on the apples? This is apt to happen when we have much cloudy, moist weather in July, as we have had in some sections this season; and one feels so disgusted that he did not put on one more spray and stop it.

And so the list might be extended. Make a thorough canvass of the situation; make a record of what you find and make a firm resolve to do better next year.

Narcissus for Winter Bloom.

The narcissus varieties may be potted for winter bloom as soon as the bulbs are obtained in September or early October. If it is desired that the bulbs be grown in the home window, it is advisable to use either a six or eight-inch flower pot, setting from five to ten bulbs according to the size of the stock. If it is desired to grow the bulb bloom in quantity and use the cut flowers in vases, then plant the bulbs in boxes of any size and not less than three inches in depth. A box twenty-four inches by twelve inches by three inches is very handy. The soil should be rich garden loam to which add one-third of the bulk of leaf mould and sufficient sand to keep the soil from clinging. Suitable drainage provided by means of coarse cinders or broken pottery should first be placed in the bottom of the pots or boxes and then the prepared soil in quantity sufficient to reach within one-half inch from the top of the box or pot after firming. The bulbs should be pressed into the soil and covered firmly, just leaving the tip showing. When all the boxes or pots are prepared such should be buried if possible in cold frames or the basement, watered well and then covered with five inches of sand or screened cinders. This covering will insure the necessary cool conditions and prevent drying out. Such treatment will develop a good vigorous root system, a condition which must precede the bloom. Eight weeks beneath the sand is usually sufficient. A pot may be examined and the bulb found to be full of roots it can be moved to the light and heat. From four to six weeks of forcing are required to bring narcissi of the following listed varieties into flower: Von Sion, Glory of Lieden, Sir Walter, Trumpet Major, Emperor, Emperess, Golden Spur, Olympia, Sulphur Phoenix, Bi-color, Victoria, Barrii Conspicua, Madame Plemp, Alba Stella, Cynosure, Poeticus ornatus, Poeticus grandiflora and the Polyanthus and Poetaz types of all varieties.

A bundle of small rubbers costing only a few cents, are much better than twine or pins for holding parcels. Put pieces of a kind together, roll and slip a rubber round it. The work of untieing to find any particular piece is dispensed with and the roll takes up but little room.

Poultry

When going over the hens in the late fall to eliminate the undesirable breeders, there are a number of definite things that we should look for.

First of all, it should be the purpose, in examining the birds, to be sure that they are physically fit; in other words, that they show no signs of disease, either past or present, which would incapacitate them as future layers and breeders.

The eyes should be examined carefully for evidences of roup and colds. The inside of the mouth and throat should be examined for evidences of canker. The general fleshing of the birds should be determined to see that they are holding up well in weight. The condition of the feathers in the vicinity of the vent should be examined to see that the birds are free from diarrhoea or any ovarian disorders, which might be responsible for the laying of imperfect eggs.

Do not fail, when making the final examination, to look the birds over from a breeding standpoint, to see that they possess no noticeable defects, such as squirrel tail, side sprigs, stubs and other standard breeding defects which might be passed on to the future generation of chicks.

We must always remember that it is the standard-bred birds which possess production qualities for which there is the greatest demand and the most profit.

When looking over these hens, all of which are superior birds, because they have stood the test of an all-summer culling, be sure to lay special emphasis upon a few very important characters which designate their productive capacity.

Pick those hens, first of all, that have good big bodies with great body capacity; good width of back, with the width carried well back; a back which is free from large accumulations of fat. Be sure and select birds with bodies that are deep, front and rear. Select ones that have large, soft abdomens; large, soft, moist vents, if they are in laying condition; skin which is thin, soft and oily to the touch; pelvic bones which are well spread.

Lastly, do not forget the head. The ideal hen has a refined head. She has a head which is moderately long and broad, and a beak which is short and well curved.

The application of these principles to the selection of the breeds this fall will probably do more to insure good chicks next spring than any other group of things which might be attempted.

Careful studies show that less than 2 per cent. of the girls who win beauty contests can make good lemon pies.

Getting By in Lean Months.

Every chicken man knows October is the lean month with the hens. It is the month when one derives the least income from the flock, primarily because production is at its lowest end.

Our birds are laying an average of between twelve and thirteen eggs each during the month of September, but in October they will drop rapidly until they are only laying round six or seven eggs a bird per month. This means a decrease in revenue of nearly a half.

This being the case, it brings home to us the desirability of working out a scheme of poultry management whereby we will spread out our income to supplement the meager returns received from eggs.

There are two ways of doing it:

Hatch some early pullets next year, have them come into lay along in August and they will be up round a 50 per cent. production in October, thus giving in this month of low production but high prices a heavy egg production.

Then the second way of accomplishing this same purpose is to try and diversify our source of income. Though our egg production must be the big end of the business, yet if one has sufficient range and can grow a few hundred extra pullets there is always a ready market for them in October.

When the pinch comes, as it has right now, let us make a resolution to get more eggs in October another year and to supplement our market-egg income by having some pullets to sell at this time.

In Switzerland the price of farm land has become much higher than its productive value, due in a large measure to the fact that more farmers' sons than formerly are buying estates.

The ultimate factor in the solution of most of life's great problems is leadership. The real leader is the man who can get the community, the township, the county or the province to pull together and accomplish something worth while.

Lamps for Floor and Table With Tasteful Shades

BY LUCY D. TAYLOR.

I know that for those of us who have to burn kerosene it is not easy to find pretty, attractive lamps. The hardware stores have a few nickel ones tucked away in back corners, and the city department stores are not much better. But the effort expended in getting good looking lamps brings worthwhile results, for lamps with colored shades are to a room what trimming is to a dress. They add the little spots of color which show that someone has been thoughtful and painstaking.

Fortunately, there are still possibilities left outside of the regular channels, and it is to these that we must turn. Often an old brown or gray jug of our grandmother's day will furnish the base.

Sometimes a pottery vase or deep bowl can be secured that has a wide enough mouth to make a generous-sized oil reservoir and can be converted into a regular oil-burning lamp.

These bowls and vases come in a variety of sizes and colors: nice browns, tans, and buffs, some in brighter colors—blues, yellows, greens and reds. They are all good, provided you use them so that both base and shade harmonize with the rest of the color scheme.

In the blue and brown or blue and tan room there is nothing better for the base than soft brown or tan, with the shade in parchment, cloth, or silk of lighter tan and banded or trimmed with blue. Sometimes even a bright red base may be used, provided there is a good deal of corresponding red either in curtain pattern or rug design. Shade colors are tricky. One which may be a delightful spot of color in the daylight may not be at all the one to choose for a good light. Usually it is wiser to keep the yellow tones for the body color of the shade. No other color will give such a soft mellow light. But this may vary from a creamy buff to a deep tan.

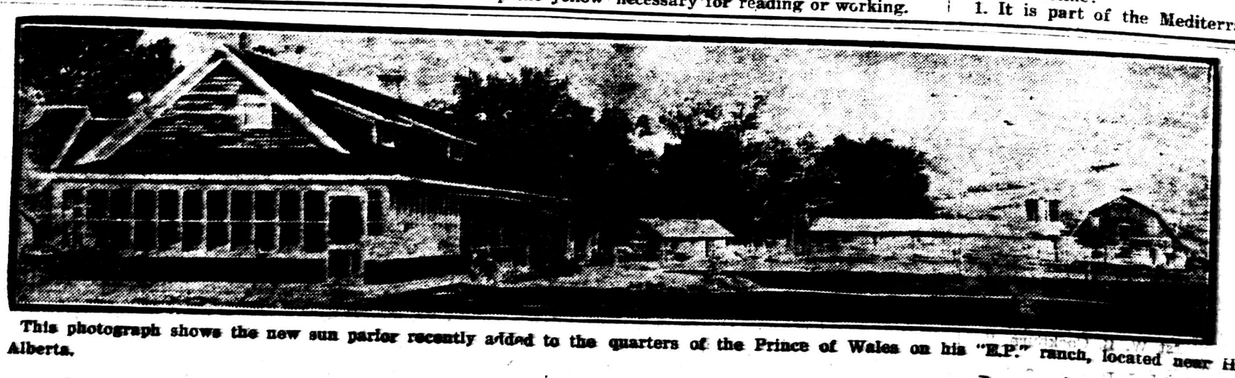
Red is particularly bad. It discolors all of the other colors and cuts off a lot of perfectly good illumination. Though green is often used with a white or very light-colored lining to reflect the light rays down, thus making an excellent reading light, it is not nearly so good for the rest of the room as some other colors.

Keeping the shades in lighter, neutral tones, and then brightening them up with bands and trimmings which echo the brighter colors in the room, usually proves most satisfactory.

You may be fortunate enough to have electricity. If so, your problem is easy. The stores are full of good-looking pottery and glass bases of all kinds. A little glass lamp with a fresh gingham shade is a pleasing addition in a bedroom.

Then, there's the question of how to place your lights so as to get the best results and have a grateful, easy effect in the room. Overhead glare has gone out of fashion. True, it lights the nethermost corners, but its sharpness has driven us in throngs to the oculist. In many country houses where electricity is not available the old-fashioned candle sconces are being used and placed either at the sides of the mantel or over the ends of the davenport.

For exactly the same reason—comfort to our eyes—the majority of present-day lights are the reading lamps placed at intervals on small stands or tables about the room. This arrangement keeps the light below the level of our eyes when standing or sitting, and gives the illumination necessary for reading or working.



This photograph shows the new sun parlor recently added to the quarters of the Prince of Wales on his "E.P." ranch, located near High River, Alberta.