

# Efficient Farming

## THE STORAGE OF VEGETABLES.

The successful winter storage of vegetables, although quite simple, is often unattained, chiefly as a result of improper care or neglect. Every attention may be given to growing and harvesting, and a desirable result obtained, yet it frequently happens that, through careless or improper storage, the greater part of the crop is lost by rot or injured by wilting.

In general, the main requirements for the storage of most vegetables are somewhat similar. Protection from frost is essential, yet the temperature must not be high enough to permit growth. From thirty-three to thirty-eight degrees, Fahrenheit, may be considered as the extreme range. Ventilation is necessary, especially during the first week or so of storage. Soon after harvest, all classes of roots lose a certain amount of moisture by evaporation, or, as it is commonly known, sweating. If an adequate circulation of air has not been provided for this, moisture will condense and form wet places, thus making favorable situations for the growth of moulds and other forms of plant life that may, directly or indirectly, cause rotting. If, on the other hand, too much ventilation is given during dry weather, excessive evaporation is encouraged with a consequent wilting of the vegetables. During cold weather, the ventilation must be controlled to avoid freezing. Light should be excluded as it not only promotes growth but depreciates the keeping and eating qualities of the vegetables.

Broken, bruised or diseased specimens should not be stored with healthy ones, as they will invariably rot first and, in so doing, generate heat, which will help spread infection that may cause serious loss before it is detected.

The above, although constituting the general principles for winter storage, do not meet the requirements for all classes of vegetables, as the different kinds will not keep equally well under the same conditions. Accordingly the common vegetables may be grouped, as follows:

Horse-radish, parsnip and salsify are not injured by freezing and may be left in the ground until early spring. It is, however, practically impossible to dig them out of the frozen ground during the winter and, for this reason, other methods of storage are preferable. Of these, pitting is probably the most satisfactory. When cold weather is about to set in, the roots are placed in a neat, conical pile on a well-drained site and covered with straw to a depth of six or eight inches. After the roots have stopped sweating, the straw should be covered with four or five inches of earth. Where a ton or more of the crop is to be stored in one pit, ventilation shafts should be provided. In a pit of this nature, the roots are not likely to freeze, but if they do, they will not thaw again until late in the spring as the straw and earth act as an insulator. This class of vegetables may also be stored in a cool, cool cellar, if space is available.

Potatoes, turnips, beets and carrots all require similar storage conditions. They may be satisfactorily stored in well-constructed pits, with a covering sufficiently heavy to prevent frost injury, but, as a general rule, the best storage place is a well ventilated, yet frost-proof, cellar. Small quantities may be kept in good condition by being packed in moist sand either in the cellar or in any place where frost or a temperature above forty degrees may be avoided.

Cabbages, although not injured by a light freezing, are usually of better quality if untouched by frost after harvest. Dry air and temperatures are very injurious, as cabbages wilt easily. For this reason, out-door pitting is very satisfactory. The cabbages are pulled, leaving the roots on, piled in a conical pile, with the heads down, and covered with straw and earth in the same manner as the pit described for parsnips. Where extremely cold weather occurs, an additional covering of straw and earth should be added as late in the season as possible. Cabbages may also be stored in a moist cool cellar.

Squash and pumpkins differ from other vegetables in that they should be stored in a dry place where the temperature may go as high as fifty degrees. An attic or an unused room in the house is usually quite satisfactory, providing the temperature does not go below the freezing point.

Onions require much the same condition as pumpkin and squash, except that the temperature must be kept comparatively low, yet above freezing. Celery is probably the most difficult of all vegetables to keep throughout the entire winter. It may be stored in an outside pit, but is better transplanted late in the fall, into moist sand, in a dark cool cellar. In doing this as much of the root system as possible is retained and the plants are set quite close together. Throughout the winter, the roots must be kept moist by carefully watering the sand from time to time. If the tops are wet, rotting will soon start. In order to prevent moisture condensing on the leaves, adequate ventilation is necessary, but care must be taken to prevent freezing, as celery will not keep well if it has been frozen in storage.

## WINTER INJURY AND ITS PREVENTION.

Winter injury may take two forms

in practically all plants: top injury and root injury. Root injury may be largely controlled, in those plants propagated on different roots, by selecting hardy stock. In apples, for instance, hardy native crabs like Transcendent or hardy Russian varieties, produce hardy stock for roots. Such roots will stand much more severe conditions than French crab stock. Likewise, native plum stock is harder than the Myrobalan, so that the first consideration of a fruit grower in regions where trees suffer from root injury is to ascertain that they are propagated on hardy stock.

Small fruits, such as raspberries, strawberries and grapes, which are grown on their own roots, must be given protection against root injury. Fortunately raspberries are able to stand severe conditions and it is only in the open prairies that they have to be covered completely with earth. Grapes, except in the best fruit areas, should be laid down in the fall of the year and completely covered with earth to a depth of six inches or more. Strawberries are protected by a covering of straw or some coarse material applied in the late fall.

Practically nothing can be done to prevent top injury of trees at this time of the year, but the reader should bear this point in mind and for the future plant only those varieties which have been found to be hardy for his district, and, in the orchard already planted, discontinue cultivation early in July so as not to encourage late growth, which is liable to kill back. Well-ripened wood is essential and cannot be obtained if late cultivation and fertilization are practiced.

Top injury to raspberries is very easily prevented in the most severe regions by the complete covering with earth, as previously referred to, but in districts such as Eastern Ontario it is only necessary to bend down the canes and place a few shovelfuls of earth on the tips to retain the canes in a recumbent position so that they may be covered by the snow and thus protected. Late cultivation of all bush fruits should be discouraged, as well ripened wood is just as essential as it is in the case of trees.

Aside from the ravages of winter, depredations of rodents account for heavy losses in young fruit trees. These animals, when food is scarce in winter, will strip the bark from young trees, sometimes completely girdling them, causing their ultimate death. This can be prevented by wrapping the trees in the fall of the year with building paper, or by placing around each tree a coil of expanded metal lath to a height of about two feet. These may be purchased, cut to the required width and length, and are easily fastened together by pieces of galvanized wire. They make for permanency and in the long run are cheaper than the yearly use of paper.

## Poultry

Raising turkeys is one thing, marketing them profitably is quite another. The marketing problem, despite the fact it is usually looked upon as one of simplicity itself, is a problem of no little importance, for here rests the harvest, much or little, for the season's toil.

Turkeys, whether sold for breeders at a fancy price or sold to the merchant for Thanksgiving or Christmas trade, should have some special care along about the first of October. In either instance they should be kept on range as long as possible for health, but given very different care otherwise.

Turkeys of good breeding—that is, purebred stock—are always in good demand for breeders. Keep such turkeys on range as long as possible and feed very little fattening food. A diet of wheat, corn and millet is good, given very sparingly to avoid an over-fat condition. Unless such grains are of first class quality, thoroughly matured and free of sap and mold, it is better to toast them in an oven to a light brown before feeding. Fat, it is well to remember, is an objectionable feature in breeding turkeys.

Turkeys for the Thanksgiving and Christmas trade should be fat, yet producing this fat condition and saving the turkeys is not an easy matter, for it is well to remember no fat turkey is long a healthy one. To produce a fat turkey, therefore, and at the same time a healthy turkey, one must bring about this fat condition by degrees, and not abruptly.

Exercise is essential for health, therefore such turkeys should be kept on range as long as possible and given fattening foods, such as corn, for a period of two or more months, gradually increasing the amount till turkeys show prospects of getting fat by marketing time.

To find a slow leak in tire, remove inner tube and pump it up as much as it will stand without bulging. If immersion in water fails to show the leak, as will usually be the case with a slow leak, hang the tube up in a place where it will not be disturbed. A day or so later when it becomes plain that some of the air has escaped, pump it up again. The slow escape of air will gradually enlarge the small leak until it becomes large enough to produce bubbles when the tube is immersed in water.

# HOME AND COUNTRY

Learning to Think and Speak on Your Feet.

GIBSON SCOTT.

At Sunbury, a Frontenac county community purely rural, there is a fine neighborhood spirit of co-operation.

The two church denominations have voluntarily united, worshipping in the building of the one, and having the minister of the other to preach to them. The second building is being put to use as a hall, while the Women's Institute and the Township Council are considering ways and means to gather for the erection of an up-to-date Township Community Hall.

They propose availing themselves of the Government Short Courses in Agriculture and Home Economics in the more leisurely months of the year and are making full use of Departmental speakers and literature in the meantime. In the monthly program of the Institute, they discover and apply local abilities in music, demonstrations, papers, and social talents.

They are training themselves in public speaking, believing that farmers do not give enough attention to learning to speak and think on their feet. At a summer meeting, a joint gathering of men, women and younger people, when a teacher of public speaking was visiting the Institute, after following it up with an application to the principles laid down, in an impromptu debate. Two members of the Township Council were deputed to choose sides, which they did, thirteen to a side.

A farmer made the statement, "If I

were to sell my ten thousand dollar farm and put the proceeds in Government five per cent. bonds, I should be better off."

This was considered to be a decidedly debatable subject. Each member of the two teams was to speak one minute, state and establish one point for his side, and make himself heard by all.

Three young men improvised a song, constituted themselves time-keepers, and rang off each speaker at the end of sixty seconds. The Institute President took the chair. Within forty-five minutes every person on either side had spoken though not six had ever been on their feet before in a public meeting. Before the gathering dispersed, a group of the young men collected eagerly suggesting topics for "more of these debates."

The enterprising and friendly community spirit which thus unafraid, discovers and begins to develop its own, frequently hidden but none the less existent practical and cultural talents quite independently of town or city influences is going to create a neighborhood where the turning of a ten thousand dollar farm into bonds would never be considered. Rather those country lovers chained by circumstances to the city would be debating the amount of initial capital necessary to avail themselves of the Government Long Term Farm Loans in order to get one of these farms.

## Sheep Notes

Every flock has in it inferior ewes. A portion of these should be sold off every year and their places taken by the choice of the lamb crop. How many to cull out will depend upon the number of sheep the owner wishes to keep. If he desires to cut down the size of his flock then he should cull closely. If, on the other hand, he wishes to increase, then only the very poorest are eliminated.

Fall is a good time to do this work. The inferior animals can be readily picked out then. Ewes with unsound mouths, injured udders, or faulty type should either be put in the fattening pen or sent immediately to market.

## The Experimental Farm System.

Much interesting and valuable information is contained in the report for 1923 of the Director of the Dominion Experimental Farms, Mr. E. S. Archibald, B.A., B.S.A. It tells in concise and condensed form of the doings in 1923 of the fourteen divisions of which the Central Farm at Ottawa consists, of the twenty-three branch Farms and Stations, of the half dozen Substations in Yukon Territory, in Northern Alberta, Northern British Columbia, and Northern Quebec, and of the Illustration Stations, the number of which was increased during 1923 from 89 to 125. There were, when the report was prepared, six Illustration Stations in Prince Edward Island, fifteen in Nova Scotia, seventeen in New Brunswick, thirty-five in Quebec, seven in Ontario, twenty in Saskatchewan, twelve in Alberta, and thirteen in British Columbia. In every instance these Stations are established in districts where it is considered they will be of most assistance to farmers. With every province having its Farms or Stations extending east, west, south and to the opened-up districts of the north, it will be seen that the Dominion Experimental Farm System penetrates to all the confines of the country.

Usually it is necessary to pump up the tube only two or three times and the greatest number of times in my experience was five.—D. S. B.

# TRAINING OUR CHILDREN

Don't Enter Into Children's Quarrels and Arguments.

BY HELEN GREGG GREEN.

"I don't like Dick's mother," Bud confided one day when he, Aunt Emmy Lou and I were having a little heart to heart talk.

"And why not, Bud?" we wanted to know.

"Well, every time we fellows get into an argument, she's always poking her head out of the window and asking, 'Now what's wrong? Can't you play without quarrelling?' And then out she comes to settle matters. Seems pretty nibby to me. She's always spying on what we're doing. I tell you, we don't often go to Dick's—not any more'n we can help."

After Bud left, Aunt Emmy-Lou, whom all children love, scolded, "Why will mothers alienate the affections of their children's friends! When Dick is older, and Margaret wanting him to bring his friends home, she'll be wondering why they won't come. I dislike these mothers who are always taking part in children's arguments and little quarrels. Children should have a little privacy of their own, and we grown-ups should respect it, the same as we expect them to respect ours."

"Well, you're right, Aunt Emmy-

## Feeding of Bees.

Two of the essentials for good wintering of bees are young bees and ample stores. To secure the first, young bees, a natural fall flow or an artificial flow produced by feeding is required to stimulate brood production. If ample stores are lacking, they must be provided for feeding.

The feed supplied may be either a honey or a sugar syrup, and in making the latter none but the best of white granulated sugar should be used.

For stimulative feeding, a light syrup of approximately one part honey or sugar to one part water is best. This syrup may be given to the bees in various ways, but the one most generally used is the honey pail method which consists in inverting a 5 or 10-pound honey pail of syrup over the frames, the cover of which pail has 3 or 4 holes in it pierced by a fine nail.

Colonies wintered in cellar should weigh 60 to 65 pounds, without hive cover, and those wintered outside 70 to 75 pounds. Any deficiencies should be made up by feeding one pound sugar for every pound lacking in stores. The syrup given in this case should consist of 2 parts sugar to one part water or 5 parts honey to one part water and should be fed from 10-pound honey pails, as above described, each pail having 40 to 50 small nail holes in the cover. Feed may be given either hot or cold. When fed hot, however, there is a greater danger of granulation but the syrup is more readily taken down by the bees.

Feeding should be done about the first of October, as rapidly as possible and in the evening to avoid disturbance.

## Illustration Stations in Ontario

The Illustration Stations conducted under the Dominion Experimental Farm system are being constantly extended in number. Last year special attention was paid to Ontario, seven Stations in all being established, two in Eastern Ontario, at Bourget, Russell county, and Curran, Prescott county, and five in Northern Ontario, all in Temiskaming county, namely at Cochrane, Genier, Matheson, Porcupine Junction, and Valgagne. The total number of Illustration Stations included in the system was increased in 1923 from 89 to 125.

# The Sunday School Lesson

NOVEMBER 2

The Prodigal Son, Luke 15: 11-24. Golden Text— I will arise and go to my father.— Luke 15: 18.

## ANALYSIS.

I. HOW SOULS ARE LOST: THE FATHER'S GRIEF, 11-16.

II. HOW SOULS ARE FOUND, THE FATHER'S JOY, 17-24.

INTRODUCTION.—Jesus, from the beginning of his ministry, sought specially to reclaim the erring and the lost. Instead of avoiding the tax-gatherer and the sinner, he sought their company, and even visited their homes. It was not for Jesus to wait until the lapsed came to him. He made it his business to take the initiative, and to go to them. In so doing, he broke through every barrier which the narrow and unforgiving religion of his time had set up between the saints and the sinners. Jesus said that "goodness" was just being like God, and to be like God one must seek the salvation and the good of every lost soul of man. This is the lesson taught in the Parable of the Prodigal Son. Jesus was attacked by the Pharisees for associating with sinners and sitting with them at table, Luke 15:1, 2. He made answer in three parables, all dealing with the joy which exists in heaven when a lost soul is brought back to God.

## I. HOW SOULS ARE LOST: THE FATHER'S GRIEF, 11-16.

Vs. 11, 12. The tragedy unfolded in the first half of the parable involves not only the erring son, but the father from whose love the son turns away. Indeed, it is the father who suffers most. He would fain keep his boy with him at home, where he is safe, but the boy is impatient to see the great world, and to take the management of his life into his own hands. Instead of waiting till he received his inheritance at the proper time, he asks to have it now. He wishes to capitalize his prospects, so to speak, and to go away where he will be his own master, and be able to do as he likes.

Vs. 13. The son does not say that he is leaving home, though it is in his mind to do so. But in a week or so he shows his real intentions by selling his effects, and bidding his father good-bye. He intends to go to a distant country—we may think perhaps of Italy and Rome, the centre of the great world's life. Arrived there, he gets into bad company, and soon loses all he has.

Vs. 14-16. He did not, perhaps, expect this, and he does not know that days of famine are at hand, but they come. He has nothing left, his companions have made off, and here is nothing for it but to take service as a swineherd, and to live on a pittance, with a lower standard of living than the swine. He has run through his fortune, and no one pities or relieves his condition.

## II. HOW SOULS ARE FOUND: THE FATHER'S JOY, 17-24.

Vs. 17-19. The lost son comes at length to himself, or to his senses. Sitting with his head in his hands, he remembers his father's house. How happy and blessed with everything was every one there, even the servants. He feels faint and wretched, and wonders whether, if he went home, his father would take him back as a servant. He thinks he will try. He will tell his father everything, how utterly wrong and mean he has been, a sinner against God and his father, and

no longer worthy of the name of son. So Jesus describes the beginning of repentance in a convicted sinner.

Vs. 20. Meantime, what about his father? The son does not know that all the time his father is waiting broken-hearted for his boy to come back. Every day he is going to the door, and peering down the road to see if he is not returning. One day he sees him, and with a heart full of pity he rushes out, and clasps the son to his heart, and kisses him.

Vs. 21-24. The lost son has not dreamed of a reception like this. He expected his father to shut the door in his face or at least to impose hard terms upon him. He tells his father what a wretched he has been, and no more worthy to be treated as a son. But will the father turn him away, or send him off among the servants? No, for the boy's coming back shows that his heart is changed, and this being so, all can be forgiven.

So Jesus describes the love of God to penitent sinners who return to him. Men do not know the love of God, and how he yearns for the sinner to come back. Had they known it, could they have upbraided Jesus for going after the outcast and the lost? Surely they could not. The purpose of the parable, therefore, is to show the difference between God and the harsh and narrow Pharisees of the day. Jesus must go after the outcast, for there is joy in heaven when sinners repent. We are to think of God as like the father in the parable. The sins of men are a tragedy to him, and the redemption of their souls is precious.

## APPLICATION.

How foolish was it of this over-privileged lad to leave home and plunge into a life of debauchery and excess! How disenchanted and degrading to find himself feeding pigs and eating the husks which the swine did eat! Is it any more so than the experience of any one who becomes enslaved by drink? In June of 1807 we find the poet Byron writing from his college rooms, dwelling with boyish delight on his late hours and heavy potations. But see how he talks later when his course was nearly run. My days are in the yellow leaf. The flowers, and fruits of love are gone.

The worm, the canker and the grief Are mine alone! The prodigal son could have said the same.

The disenchantment of those who wander into evil ways is intended to make them stop, look and listen. The prodigal came to himself before he came to his father. Experience teaches us fools. Indeed it would appear that no verbal teaching goes very far home to the mark until it is driven there by force of experience. The sufferings of the man enslaved by drink are often terrible, but it is better so, for otherwise the man would keep right on in his "cheerily smooth course," until, without knowing it, he should arrive at the painless hell of abject slavery to a mere appetite.

When this prodigal came back to his father he found forgiveness and restoration. The heavenly Father is able and willing to save unto the uttermost, all those who come unto God, through Christ.

# KEEPING A FARM OFFICE

BY DALE R. VAN HORN.

A farmer who recently bought nine head of purebred hogs by mail, said to me:

"Yes, that man in Eastern Ontario apparently had some mighty good hogs and at mighty good prices. But when I received his reply to my query, I was doubtful. He wrote with a pencil on a piece of square paper ruled off with pencil. His writing looked hasty, and there was not a sign of prosperity about the letter. Now I figure that a man who is in the farming business, whether it is wheat, corn, dairy cattle, horses or hogs, ought to be successful enough to use an individual letter-head. So I passed up that offer—and mind you, it might have been a good one—for this chap over in Bruce County who uses a typewriter and some specially printed letter-heads. Say, you ought to see that letter-head of his. Come into the house and I'll show it to you."

Perhaps this man was the exception to the rule. Perhaps the average buyer pays no attention to the kind of letter the other fellow writes. But other things being equal, isn't the man who puts his message on a clear white sheet, with his name and address printed at the top, with the name of his farm in big bold letters, and especially if the message is typed, going to have a better hearing than the one who writes with a pencil or ructed pen and on a sheet torn from the boy's school tablet?

Of course, that is a problem for each one to decide. Expense is the first consideration. But, after all, this kind of good appearance is nothing more than advertising itself, and one should turn to it as instinctively as one does when he fixes up a little before the arrival of the prospective purchaser of the place.

Even the most simple farm office should contain a record, and if the equipment is to be acquired slowly and one item at a time, this will come first. The book should be divided into various departments—one for poultry, another for dairy, another for crops and so on. If the book is of the loose-leaf type, alterations can be made or more blank pages added when desired. The next acquisition should be a

letter-file. One of these can be bought for as low as \$5 or \$6, and is certainly worth the money. In this all business letters should be kept, the sheets opened flat and stood on edge. If the inquiries which come in can be divided into several classes, then dividers should be set in the main file and each group of letters arranged alphabetically. To serve the same purpose, but in a more limited way, one of the smaller book files can be bought for less than a dollar.

Then come letter-heads and printed envelopes. These can be purchased for almost any price and they are of many grades. The best way is to work out the heading definitely and jot it down on paper, then take the proposition to several printers for quotations. A light buff or grey paper is often more attractive than plain white. If you can afford it, a small cut of the home place or one of the prize animals should be worked into the heading. Often the same type and wording which appear on the top of your letter-heads can be duplicated in the upper left-hand corner of the envelopes.

It will pay to get a large order of printing at one time, as 1,000 envelopes and letter-heads will cost less proportionately than 500. It will also pay to get two sizes of envelopes—one for straight correspondence, and the other of No. 10 size, which will take additional papers when necessary.

Now everything is complete but the typewriter. You can learn to use one in a short time. Your first letter will not be a masterpiece, but it will be better than the letter my friend mentioned. If there is a young man or woman in the home who secretly covets the privilege of learning to write on a standard keyboard, why not turn that end of the business over to him or her? Usually a book of instructions, which shows how to proceed, is included with a typewriter. The book itself may cost only \$10 or \$15—or it may be a brand new one and cost \$100. Suit yourself. Put it should pay—and pay big!

One way to help people is to refrain from giving them advice.