

# EFFICIENT FARMING

**A. H. L.**—Which is the best time of the year to move trees, and how do you take them up? I have had some nice trees offered me if I will move them. Among them are the horse chestnut, ash, maple and soft maple. Some people say to dig around them now and move them, fall when frozen up. They are from four to eight inches through.

**Answer**—Trees from four to eight inches in diameter may be moved, but at considerable expense and with liability of some loss. It is doubtful if trees more than five or six inches through can be moved with any degree of satisfaction. The process is to dig in a circle from 3 1/2 to 5 feet in diameter, removing the soil in such a way as to leave the roots without being disturbed in a ball of earth. This should be done in late autumn after the leaves have fallen, allowing the earth to freeze sufficiently to prevent it falling away when the trees are moved. To prevent the ball of earth freezing solidly at the bottom it is well to bank in a small amount of warm stable manure at the bottom of the trench. The hole in which the tree is to be planted should be prepared in advance and protected from frost. A low boat like a stoneboat is perhaps the best vehicle for moving the tree to its new location. Before growth commences the following spring considerable of the top should be removed, either by thinning out the branches or shortening them, depending on the style of top desired. The roots should be kept well moistened practically all of the next season.

**V. S.**—I own a piece of sandy land which is in rye. I intend to turn under when ripe and seed to clover or alfalfa. How much seed will I need to the acre? Which is best?

**Answer**—Good practices would call for turning under the rye before ripeness occurs. Seeding to clover or alfalfa had better be delayed until next spring. Twelve to fifteen pounds of red clover constitutes a good rate of seeding. Alfalfa seed is usually applied at the rate of about twenty pounds to the acre. It is difficult to compare these clovers as their habits are dissimilar. Red clover usually runs out in a couple of seasons, whereas alfalfa continues to yield crops for several years if the soil is suitable.

**Mrs. C. B.**—Will you please tell me why Swiss chard and beet leaves have holes in them? They look as if something was eating them full of holes.

**Answer**—Perhaps it is grasshoppers, or it may be the caterpillar or some other insect that is eating the holes in the Swiss chard and beet leaves. It is possible, however, that the holes have been caused by a hail storm. Hellebore is perhaps the safest insecticide to apply to such food crops as chard and beets. It may be dusted on while the leaves are moist or applied as a spray. If applied dry the hellebore may be mixed with an equal quantity of some powder such as flour. It should be mixed for a few hours before use and left in a closed receptacle. A teaspoonful of hellebore to a gallon of water makes a satisfactory spray. A pamphlet entitled "Common Garden Insects and Their Control," issued by the Department of Agriculture at Ottawa contains valuable information on the protection of garden crops against insect depredations.

**C. E. F.**—Will you please tell me what I can sow on muck land to make pasture for cows for fall?

## A Successful Fly Spray for Cattle.

Farmers experience a good deal of trouble during the hot summer months from the fly nuisance, particularly on dairy cattle. Many commercial fly sprays are on the market and in most cases they are fairly effective in keeping the flies off the cattle, but some of them are injurious to the skin and hair and possibly may not be as much value as would at first appear. The main consideration is to keep the flies off while the operation of milking is in progress. It is next to impossible to apply a spray that will prevent the flies going on the cattle some of the time between milkings. At the Ontario Agricultural College the following home-made spray, which has been extensively used in some of the States of the Union, has proven fairly satisfactory:

- 4 1/2 quarts coal tar dip.
- 4 1/2 quarts fish oil.
- 3 quarts coal oil.
- 3 quarts whale oil.
- 1 1/2 quarts oil of tar.

Dissolve 3 lbs. laundry soap in water, add ingredients of spray and bring the whole up to 30 gallons with luke-warm soft water.

This spray does injure the coat and skin to some extent, but in tests at the Ontario Agricultural College cows gave slightly more milk and were much more easily handled when this spray was applied as compared with a similar period without the spray. However, the increase in production was not sufficient to pay for the labor and the spray. The greatest value seemed to be in keeping the flies off during the milking period so that

**Answer**—We do not know of any suitable crop for muck land that could be sown to secure crops this fall. Muck land is very difficult to pasture as it is usually soft at this time of the year and the cattle trampling on the young plants would prevent them from growing.

If forage is required, however, common millet might be sown at about 30 pounds per acre. This may be cut for hay. If you require a pasture or hay mixture for sowing next spring, we would suggest that you seed down with barley the following mixture per acre, 8 pounds of timothy, 4 pounds of red top, 3 pounds of alsike clover.

**D. D. C.**—How can I control squash bugs?

**Answer**—Eggs of the squash bug are easily seen and can be picked off and destroyed. The adults cannot be killed by insecticide applications but the nymphs or immature stages may be destroyed by any contact spray such as kerosene emulsion. The adult bugs, however, may be trapped by placing small pieces of board or some similar shelter near the vines under which they will hide at night and from which they may be gathered in the early morning. Cucumbers and melons may be protected by planting early squash among them. The adults prefer the squash and they may be collected from this plant. Cleaning up the vines in the autumn is of importance in reducing the numbers which will hibernates.

**L. F.**—What causes my muskmelons, watermelons and cucumbers to be eaten or chewed up, and yellow spots to develop upon them? For the spots I have sprayed with Bordeaux with but little apparent good. I also dusted with alaked lime, but to me it seems to have burned the plants and stopped them from growing. Would ammonium sulphate help the growth? Poisoned bait did not seem to help destroy cutworms. Also advise best spray for small tomato plants.

**Answer**—The trouble to muskmelons, cucumbers, etc., is doubtless pathological in nature and in order to obtain information regarding the disease the correspondent is advised to submit specimens to the Botanical Division of the Experimental Farm, Ottawa. Re Cutworm Control—Satisfactory control of cutworms by poisoned bait applications is only obtained in the early spring. In mid-summer the poisoned bait is only partly effective by reason of the fact that cutworms have too much choice in the matter of food. Our commonest cutworms pass the winter as pasty grown larvae in the soil. They become active at the time of seeding. It is at this time of year that poisoned bran may be distributed at the rate of ten pounds to the acre and excellent results will be obtained.

**K. R.**—I would like your advice on the best kind of a floor for a henhouse. Have house which is built of modern design, with lots of light. Would cement be all right if built up high enough to be dry?

**Answer**—The Dominion Poultry Husbandman says: Of all floors we have tried the cement floor gives the most satisfaction. We make sure, however, that the land upon which it is placed is well drained and that there is a reasonable fall to the surface from where the building is placed. The top of the floor should be from 10 to 12 inches higher than the top of the surrounding level. Bulletin 87 on poultry house construction gives a detailed plan of putting in this floor.

there was a good deal less trouble during milking, so says Professor Wade, Toole of the Animal Husbandry Department, Ontario Agricultural College.

## Look Out for Your Seed Potatoes Now.

It is not too early now to be looking out for seed stock of potatoes for next year, says the Superintendent of the Kentville, N.S., Experimental Station, as at this time of the year fields reasonably free from mosaic and leaf roll, and showing an even stand of healthy plants, can be located. It is impossible to locate these later after the plants commence to die down. This is a matter of great importance, and as our authority points out, if promptly acted upon may lead to an increase of from 25 to 50 per cent. in the yield. A number of tests at Kentville have shown a yield from healthy hills of 238 bushels per acre, while from unhealthy hills, namely hills affected by mosaic, only 136 bushels were taken. Again, hills free from leaf roll have produced an average of 347 bushels per acre, while those showing symptoms of the disease produced only 194 bushels.

My small daughter recently accompanied me on a trip to a neighbor's purebred stock farm. She was particularly impressed with the Holstein cattle. Just as we were admiring them, a black and white cat strolled into the barn. "Oh, Daddy, look, look, they even have Holstein pussies to match!"—K. B.

## SHEEP

We have found the golden hoofs profitable, not only to clean up grain but weeds and grass in the pasture as well. In my first experience with lambs in the cornfield I learned something that I had not known. Instead of getting fat, the lambs were not doing anything at all. I called in a neighbor who had handled sheep for years. He felt a few of the animals, and after looking around told me what was wrong.

"Evidently this corn is too high on the stalks for them to reach," he said, "and there is not enough grass here to do them. All the lambs get is what corn they can reach, because the blades are practically gone. They won't fatten on this. Take down the fence and let them in that clover pasture."

Within two weeks I could notice a big difference. From then on the lambs fattened as I originally expected, and they sold right up around the top.

## DAIRY

Every dairyman has had his experience with a few of the common ailments of dairy cows. Like man, the dairy cow is subject to common ailments that if taken care of as soon as symptoms appear cause little trouble, but if allowed to run for a time become serious and not infrequently result in permanent injury and loss.

A cow off feed is a common occurrence with the dairyman. A few days ago I brought my herd up from the pasture as usual, and when stabled one of my heaviest milking cows refused her grain. I immediately took

the grain away and gave her a pound of salts. In a day or two she was all right again. I always think when a cow goes off her feed the cause is a little digestive disorder and a laxative is all she needs. However, to allow a slight attack of digestive disorder to get well started means calling a veterinarian and a material loss of milk production.

Two of my best cows have come up from the pasture this summer with injured quarters to their udders. When taken early before inflammation has set in, bathing the quarters with cold water several times a day soon overcomes the trouble without any bad effects.

It is not uncommon to have a cow get a bad cut about the udder or the body, either from a snag, barb-wire or some sharp iron, and while not a deep wound in hot weather, soon calls flies and refuses to heal. If thoroughly washed with disinfectant two or three times daily the wound soon heals. I keep some good disinfectant about my stable at all times. Immediate attention to common ailments among cows prevents loss in milk flow and guards the health of the herd.

Buy gas and oil in quantities. Be sure that there are no leaks or loose caps to permit evaporation. See to it that no insurance policy is violated by the method of storage of gas and oil. If necessary, get a permit for the extra motor-driven vehicles stored, and attach this permit to your policy.

The next generation will be as good as we make our children. Each parent should do his share to make the future better than the present.

## The Sunday School Lesson

AUGUST 26

**Barnabas the Great-Hearted.** Acts 4: 36, 37; 9: 26-30; 11: 19-30; 12: 25; 13: 1 to 15; 12: 35-41; Gal. 2: 13. **Golden Text**—He was a good man, and full of the Holy Ghost and of faith.—Acts 11: 24.

**LESSON SETTING**—This week we study the life of one of the great characters of the early church. Barnabas is translated to mean "The son of consolation." Moffat translates it "The son of encouragement." The life of Barnabas fulfills both translations. He had a discerning mind and a warm heart.

**I. BARNABAS OFFERS A GREAT GIFT,** ACTS 4: 36, 37.

**Vs. 36, 37.** And *Joseph* . . . *Barnabas*. The early church was a sharing church. No one said that ought that he possessed was his own. So much did this spirit prevail that many sold their possessions and laid the price at the apostles' feet. It is to be noted: (1) That this action was voluntary; (2) That it was not a fund for equal distribution among all, but only for the relief of the needy; (3) That it did not necessarily involve the loss of property; (4) That the practice did not extend to all persons; (5) That it was evidently an emergency measure. The case of Barnabas is quoted as an illustration of this spirit, and as a contrast to the dishonest action of Ananias and Sapphira. A *Levite*. From Num. 18: 20 and Deut. 10: 9 we learn that the Levites were not allowed to hold land. God was their portion. But evidently this law did not apply to Levites living outside of Israel. *Cyprus*: an island in the eastern part of the Mediterranean sea, where many Jews lived. *Having land*: literally, "having a field." At the apostles' feet, signifying that the money was at their disposal.

**II. BARNABAS ENCOURAGES A GREAT WORK,** ACTS 11: 19-24.

**V. 19:** They which were scattered abroad . . . *Phenice*. The death of Stephen was followed by violent persecution, in which Saul was the leader. But the dispersion of the Christians only means the dispersion of the gospel. Every Christian was a witness in those days. *Phenice* was a strip of country north of Palestine and bordering on the Mediterranean sea. *Tyre* and *Sidon* were in this district. *Jesus* made one visit to the locality, Matt. 15: 21-27, *Antioch*; still farther north on the same coast. It was the capital of the province of Syria. Paul's three missionary journeys had their beginning here. *Preaching to none but unto the Jews*; partly because the refugees would naturally live among their own countrymen, but principally because the world-wide significance of the gospel only dawned through the gradual turn of events, and the leading of the spirit.

**Vs. 20-22.** Some . . . *spoke unto the Greeks*; not Greek-speaking Jews, but Greeks who were Gentiles and pagans. These preachers of the word, having lived in Cyprus or Cyrene in Africa were naturally more in touch with the Gentile world and were not possessed by the strong prejudices of those Jews who had been brought up in Palestine. *The hand of the Lord was with them*. God blessed their preaching. *The tidings . . . came unto the ears of the church . . . in Jerusalem*. The news of this great response of the Gentiles to the gospel came to Jerusalem, which was naturally the religious centre of the new faith. The question of the Gentile convert to the Jew and the Jewish law had not yet become an acute one, although we find that Peter's action in eating bread with Cornelius and his friends, after having baptized them, gave rise to serious debate, Acts 11: 1-18. Peter defended himself by telling of his vision in Joppa. *Sent forth Barnabas*. The church in Jerusalem sent Barnabas to look into the movement and give it direction. It was a wise selection they made.

**Vs. 23, 24.** When . . . *he came . . . was glad*. When he saw the reality of the faith of the new converts, he knew that the spirit of God was at work and rejoiced at it. *Exhorted them all*.

Barnabas knew well the great temptations to which Gentile converts would be exposed. It would require grace to hold to the new faith. *He was a good man*. The character of Barnabas is described in the same words as that of Stephen. The words of Barnabas had weight, as coming from a representative of the mother Church in Jerusalem, but his real power came through his character and his spirit-filled life. *Much people was added*. A new impetus was given to the work of grace.

**III. BARNABAS BRINGS A HELPER,** ACTS 11: 25-30.

**Vs. 25-28.** *Then departed Barnabas to Tarsus*; whither Saul had gone for safety from Jerusalem. *Brought him unto Antioch*. Barnabas sees that Antioch is a great field for Saul. A whole year; during which the friendship between Barnabas and Saul would grow. *Called Christians first in Antioch*; doubtless a nickname given by the heathen population. *Agabus . . . great dearth*. He foretells famine. History confirms this prophecy. This same prophet foretells the imprisonment of Paul in Jerusalem, Acts 21: 11.

**Vs. 29, 30.** *The disciples . . . determined . . . to send relief*; a proof of the fine spirit of the church in Antioch. The action was unanimous. The burden was fairly divided—every man according to his ability. The action was unselfish—"unto the brethren in Judea." The action was timely, being done at once. The action was completed—"which also they did." By the hands of Barnabas and Saul. It was the visible fruits of their ministry.

**APPLICATION.**

The Golden Text gives a brief characterization of Barnabas, which is very interesting, because, as we have seen, there are many ideals set before men in the world's literature, and some of them are in direct contradiction to the Christian standard. Barnabas may almost be taken as the Christian ideal, "a good man, and full of the Holy Spirit and of faith." There is usually much restraint in the sacred writers, no fulsome eulogy. The facts are stated, and speak for themselves. Luke, however, sometimes seems to take us right into the confidence of the disciples, and lets us know what he and they thought of some of their great-hearted comrades. We are thankful for as much as we know about Barnabas.

In the Acts after the Day of Pentecost Paul is a dominating figure. His missionary journeys and his experiences take all the latter part of the Acts, and his Epistles constitute a large part of the New Testament. But in Barnabas we have a man without whom we might never have had Paul. Barnabas is notable for that, as well as for his own admirable Christian graces. Much of the character of Barnabas as exemplified, is disclosed in his relations with Paul.

Moralists have spoken of the great, valuable things of the spirit as the True, the Beautiful, and the Good. Some are apostles of one, others of another aspect of the perfect life. Not exclusively, however. Ruskin, as an art critic, continually wrote not only of the beautiful, but also of the true and the morally good. Stephen, whose life we considered last Sunday was perhaps the apostle of the truth—read the sixty verses of the seventh of Acts—and Barnabas was pre-eminent in the impression he made as to his goodness.

What is goodness? One answer that at any rate gives something of the truth is that goodness is something of absolute moral worth that commands our conscience and reason. A good man is one who is not unworthy of Jeremy Taylor's fine phrasing, "a mind apt to noble choices, and a heart capable of a mighty love." Such was Barnabas.

His noble choices and his mighty love are set forth by Luke in the Acts.



Dissolve in boiling water



Use enough to get a big lasting suds

Big lasting suds—one secret of Rinso's amazing power to dissolve dirt. If you don't get lasting suds, you have not used enough Rinso.

After soaking, only the most soiled clothes need a light rubbing with dry Rinso.

Your clothes don't need boiling if you use Rinso. But if you like to boil your white cottons, use enough Rinso solution to get the suds you like.

Rinso is made by the largest soap makers in the world to do the family wash as easily and safely as LUX does fine things.

LEVER BROTHERS LIMITED TORONTO

R302



Soak an hour or more (Colored clothes only half an hour)



## Two Gardens.

Two gardens for your planting. One of corn and beans and peas. Or pansies and nasturtiums. Whichever you may please. And after it is planted. There'll be no chance to shirk. For thrifty, well-kept gardens Require a deal of work.

The second garden—listen—Is of quite another kind: It's one you're planting daily—The garden of the mind. In this, 'tis thoughts you're sowing, And when they start to grow, The sort that you've been planting, Most certainly will show.

So, great pains must be taken To sow the best of seeds, For good thoughts will grow flowers, And bad ones, ugly weeds. But oh, the joy of reaping When you have done your best. You'll find, with care, both gardens Will pay good interest. —Ida M. Thomas.

## Alighting Board.

Every hive should be equipped with an alighting board. Bees coming in heavily laden are apt to miss the narrow projection on the hive and fall into the deep grass. Bees carrying a heavy load find it very difficult to rise from the grass entanglement and frequently die in the effort.

There are several different methods of making an alighting board or ground for the bees at the entrance of the hive. Some bee-keepers prefer to set the hive close to the ground, cut the grass away and make an alighting ground with sand, sawdust, or scrape the ground so as to kill the grass. These methods have some advantages. However, I like an alighting board made the width of the hive, about ten inches wide, and of white pine material.

In some localities an alighting board has the disadvantage of allowing spiders and insects to live and hide underneath. I have never encountered any difficulty in this regard. The sand or sawdust method obviates this difficulty. The important matter is to be sure and provide some kind of an alighting board.

The life of a bee during the busy honey gathering season is very short. The hard-working bees are the ones that come home heavily laden with pollen. Sometimes on account of the distance the bee has to go to gather the honey it comes home well worn out, its wings somewhat cut short and aged, it falls at the entrance of the hive. An alighting board will sometimes save the load, even though the busy little worker gives way for another. —Leo C. Reynolds.

A fly is no friend of the horse. Here is a recipe for an inexpensive wash that is very effective in keeping flies away: Oil of bayberries, 5 parts; naphthalene, 10 parts; ether, 10 parts; methylated spirit, 60 parts. These are common chemicals found in all well-stocked drug stores.

Windmills need oil more than any other farm machinery, and generally get the least.



## Be Safe!

Don't wait for someone to be in pain to get Kendall's Spavin Treatment in the house.

For all external hurts and pains—Kendall's Spavin Treatment makes good. KENASTON, Sask., December 8th, 1911.

**KENDALL'S SPAVIN TREATMENT**

## THE Agricultural Industry is our most important industry; founded on the soil wherein lies Ontario's greatest wealth.

What shall it be?

Now, young man, since you have passed the parting of the ways and decided to make your life and living within the broad field of agriculture, take advantage of the Province's most liberal offer of education.

Yes, an education at the Ontario Agricultural College that will make you a bigger and better man on the land, in the administrative office or in the science laboratory.

There are many professions within the Agricultural Industry, one of which may interest you.

The would-be Agricultural Chemist, or Bacteriologist, or Entomologist, or Biologist, or Botanist, or Geneticist, or Apiarist, or Cerealist, or Economist, or Animal Husbandman, or Poultry Specialist, or Dairy Specialist, can get a thorough and liberal training at the Ontario Agricultural College. Should you decide to continue as a practical farmer the training will be of life-long service to you. Should you decide the training will be of life-long education given by the College makes such possible to you. The College calendar gives full information. Write for it.

J. B. REYNOLDS, M.A., President. A. M. PORTER, B.S.A., Registrar.