

# Soils and Crops

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## More Attention to Farm Forestry.

Aside from the income resulting from the sale of timber, the area devoted to the farm woodlot makes a substantial contribution to the success of the farm. It provides fuel, fence posts, materials for construction and repair, products of the sugar bush, and protection to crops, stock and buildings against weather extremes. The forest holds back flood waters, improves and builds up the soil and adds greatly to the attractiveness of rural scenery.

The rapidly increasing attention that is now being given to this department of the farm is due very largely to the much higher prices recently paid for forest products. Timber is a national necessity. The country was suddenly awakened during the war to its defenseless position should our wood supply be exhausted. The increased demand occasioned by the gradual reduction of available stocks as well as by military needs and the gradual reduction of available stocks have been responsible for the flight in lumber quotations. That value will be maintained on a correspondingly higher level in years to come than during the past can hardly be questioned owing to this relation of supply and demand.

The farmer should make his woodlot permanently profitable. When the lesson that all departments of the farm should contribute a reasonable share to the operator's income is generally understood and practiced, the farmer will see to it that land unsuited for cultivated crops will be devoted to the growing of timber. Through the production of a greater abundance of trees of superior quality by protecting them from fire, thinning where too crowded and planting where too thin, the farmer's income will be enhanced. The farm management problem will be partly solved in that he will be better able to employ his men and teams during the cold months. The attempt to combine stock raising and forestry will be abandoned by the thoughtful farmer, who will rather strive to keep the floor of his woodlot free from grass through encouraging the growth of a dense forest roof. He will come to realize that the quantity of products taken from this department of the farm will be doubled and tripled if he gives it the same consideration accorded other crops.

Perhaps no province in the Dominion offers more promising opportunities for the adoption of modern woodlot practices than does Ontario. The growth of her unsurpassed virgin forests proves the adaptability of her soils and climate. The wide variety of these soils provides for the production of wood to meet every human need. Here may be found extensive areas not well suited to the culture of other crops, that may well be devoted to forestry work. The best markets in the world are available and transportation lines and woodworking factories were built for marketing this particular class of products. Since general farming predominates, the

labor situation in rural districts could be generally improved by furnishing productive employment throughout the year. These and other inducements urge Ontario farmers to a more careful study of modern methods of producing and marketing their woodland products.

## How You Can Get Good Hatches.

It is easy to forget that hatching eggs are really living objects, and must be cared for as such. Most people are very careful with eggs under a sitting hen or in an incubator, because they realize that there are delicate, living chicks inside. But they will handle eggs, before starting incubation, with no other thought than "an egg is an egg," and that breaking them is the only way they can be harmed.

It is true, before the hatching egg is heated, that the germ in it is more hardy than after hatching has started. In this respect egg germs are like buds on a tree. Buds will stand a lot of cold weather changes during the winter when they are dormant, but after a little warm weather has awakened these buds, and they show signs of life, we know that a cold spell means disaster to them.

So it is with the germ in the hatching egg. It is dormant when laid, but a little heat will start it growing. Then it is very tender, and a changing temperature will either kill it or materially weaken it. A great many eggs get heated in the laying nest. An egg laid in the morning might be under different laying hens continually, until late afternoon. The heat from these hens would be enough to warm up the egg and start germ growth. This very tender germ may be seriously weakened or even killed before it reaches the incubator. It is therefore important to keep hatching eggs in an even temperature.

There is no more important factor in successful hatching than that of moisture. If you have ever operated an incubator you doubtless know this, and provide moisture when needed. But did you ever think of providing moisture before putting the eggs in the machines? The egg shell is just as porous before it is in the machine as afterward, and it will lose moisture just as quickly if we are not careful. Once the moisture has left the egg, it cannot be replaced, so that if this factor is not considered we start off with an egg much too dry for best hatches.

Warm, circulating air is more important than cool, moist air, and will absorb water from an egg ever so much more quickly. So when hatching eggs are to be held for a day or more they should be placed in a cool, damp place. The cellar is often the best place, and the kitchen the worst.

If you will gather your hatching eggs often, if you will keep them from getting heated enough to start germ development, and will place them in a place which is neither too warm nor too dry, you will get good results. In doing this you eliminate two factors—heating and drying, which spoil more hatching eggs than anything else.

## Dominion Department of Agriculture.

The Report of the Minister of Agriculture at Ottawa, for the year ending March 31st, 1920, makes reference to a conference of representatives of Federal and Provincial Departments at which an agreement was reached which will, to a large extent, eliminate overlapping and allow for close co-operation in the varieties of work carried on. Production, it was agreed, is to be carried on through provincial activities, while marketing and experimental work are to be cared for by the Dominion Department, except where special arrangements to the contrary are deemed wise. The Report of the Minister covers, in addition, the

work of the Department carried on through the year by the various branches: Dairy and Cold Storage, Seed, Live Stock, Health of Animals, Fruit, Entomological, Publications, International Institute, and Experimental Farms. Among the new activities reported are the record of performance for poultry and special relief policy of the Live Stock Branch, with relation to the supplying of feed to unfortunate districts in the Prairie Provinces. The Report is distributed by the Publications Branch, which is shown to have sent out, during the year, two and a half million copies of publications.

A dollar saved is a dollar earned. But be sure it is real saving.

### Some goods pay more profit than others. Usually, the poorer the quality the greater the profit.

### The grocer pays more for Red Rose than for other teas—and he sells it at a less profit.

### When you buy Red Rose you buy the best.

## THE REASON

Jane was tardy at breakfast, not because she cared especially about sleeping late, but because her family insisted that a school-teacher on her summer vacation ought to sleep late. As she sat down in her cool, loose blue smock she noticed the contrast between herself and her sister Frances, who, neat and trim, all ready for her day at the office, sat opposite her.

"Have a roll, Jane?" asked her father. "Now that you are at home you must eat and get those rosy cheeks back again."

"Don't worry about me," said Jane smiling. "I'm so glad you are here at last, dear," said Frances. "I couldn't bear to think of you away up there in that little school among the horrid coal mines. And we have always had such good times together here."

"It feels perfectly wonderful to be at home," declared Jane. "Oh, by the way, sis," said Rodney. "I saw Martin on the street yesterday, and he wanted to know if you were coming back to the Chronicle this summer. He says he wants to make it permanent. He said you could be society editor by the first of the year."

"Oh, no, Rodney," said Jane mildly. "You know I made my decision last summer. I am a teacher, not a newspaper woman."

"Jane!" cried Frances sharply. "How can you talk so? You can change your mind. And such a splendid offer! Why, before I'd go back to wear myself out in that tiresome hole in the woods for the sake of a hundred wild youngsters I'd—"

"It does seem as if the newspaper work were not so tiring," said mother gently. "Of course newspaper work is no end more lively," said Rodney.

"It is better paid; there's one thing to be said for it," said father.

"Oh, but every consideration is against teaching," Frances urged her. "Teaching is just burying yourself, tearing yourself out before your time. You are never appreciated—"

Frances was interrupted by a sharp ring at the doorbell. "Postman," said Rodney. "I'll go." He returned presently with a handful of letters.

"One for Jane from her northern town," he announced. "What queer writing!"

Jane tore it open and read it. At the end she looked up with a little inarticulate noise that was neither a sob nor a laugh, but a combination of both.

"I wish you people would read this," she said breathlessly. "It's the reason—one of the reasons—why I have to go back to my high school. Herbert is a little fellow in the junior high; he just escaped being sent to reform school the year before I went up there. We got to be pretty good friends, and while he was sick in the spring he wanted to do something for me; so he gave up smoking. I thought he never had smoked since then, but—well, read it."

She passed the disreputable-looking little letter to her father, who slowly read it aloud: "Dear Teacher. I thought I would write you a few lines because I have something to tell you. You know that last night at the party you asked me if I had ever smoked again since I promised not to, and I said no; but

it was a lie, because I had. No one ever spoke as kind words to me as you have, and you are the only one I ever gave my word to; and then I only kept it a month, and I think that is what made me feel so mean the last few weeks of school. That is why I never came to tell you good-bye. Please forgive me, and I will try harder not to smoke. O Miss Harrison, if you only knew how sorry I am! I can see the smile on your kind face yet. Hoping to hear from you soon, I am, "Yours truly, Herbert Machall."

As Jane's father laid the blotted little letter gently upon the tablecloth no one spoke. Mother was wiping her eyes.

"Plucky little chap!" muttered Rodney. Jane smiled suddenly, radiantly. "Dear people, don't you see why I have to go back?"

"Yes, I see! I see, Jane!" cried Frances, springing up to kiss her. "You blessed old dear!"

## SPROUTS

Sort over the vegetables and estimate the amount needed for home use. All that can be spared will prove fine green feed for the hens and help to keep the breeding stock in vigorous condition until they can use the range every day. Mangels are cheaper than sprouted oats and are good health producers but possibly they are not relished by the hens as much as oat sprouts.

Dry mash hoppers can be made by sketching the side view of a hopper on the side of a packing box. Then saw out the hopper and use the boards removed to close up the front and top. Use a small cleat in the front of the hopper as a lip to keep the birds from drawing out the mash with their bills. A piece of wide-meshed poultry wire stretched across the opening will enable the hens to eat, but prevent wasting of the mash. Open receptacles for serving dry mash do not work well according to our experience, as the hens frequently scratch in them.

When it is snowing and blowing it is much satisfaction to know that the hens have hoppers of dry mash serving them cafeteria fashion, with the balanced ration which is as near as possible to ideal for egg production. Of course it is not exactly like the spring ration on the range, but it does help to keep hens thrifty and makes them lay.

## Canada's Maple Products.

The manufacture of sugar and syrup from the sap of the sugar maple is an important farm industry in the Eastern provinces of Canada, and particularly in Quebec. Long before the white man settled the country, maple syrup was known to the aborigines, and apart from wild honey was the only intensely sweet product at their command. The methods of procuring it were naturally of a very crude description. Modern methods have greatly improved the product and have led to an ever-increasing demand. Quebec province is the centre of the industry. Of the 20,000,000 pounds, or thereabouts, produced annually in Canada, more than two-thirds have to be credited to Quebec. Ontario is officially reported to be responsible for five million pounds, and the Maritime Provinces for half a million pounds only. The other provinces of Canada do not figure in the calculations. These facts are gathered from a timely pamphlet just issued by the Department of Agriculture at Ottawa, of which J. B. Spencer, Director of Publicity, is the author. From this well illustrated and technically detailed publication it is also learned that the production of maple sugar, and its equivalent in syrups, of late years has shown a tendency to decrease. From 1851 to 1861 we are told the average yearly production was about 13,500,000 pounds, from 1861 to 1871 about 17,500,000 pounds, from 1871 to 1881, 19,000,000 pounds, and from 1881 to 1891, 22,500,000 pounds. The latter was the pinnacle of annual production, for in the next decade the average per year was 21,200,000 pounds, and in later years the average has been little less than 20,000,000 pounds. It is thought that perhaps with the increase in price that has taken place recently greater production may be looked for. It is estimated that the value of the yearly manufacture of sugar and syrup is \$2,000,000, and that 50,000 people are employed in the industry at the height of the season, which is of very short duration, extending over only five or six weeks at the most. Stringent laws against the adulteration of the product have been passed, especially in Quebec, where schools of instruction have been established and the Pure Maple Sugar and Syrup Co-operative Agricultural Association has been organized.

It is easier to stay out than to get out.—Mark Twain.

## THE SUNDAY SCHOOL

FEBRUARY 20, 1921

The Wise and the Foolish Virgins, St. Matt. 25: 1-13. Golden Text—St. Matt. 25: 13.

Time and Place—Tuesday, April 4, A.D. 29; Mount of Olives.

Connecting Links—Between the last Lesson and that for to-day, Matthew inserts Jesus' severe denunciation of the Pharisees (ch. 23: 1-36) and his lamentation over Jerusalem, ch. 23: 37-39. Other incidents of the same day in the temple are narrated in Mark 12: 41-44, Luke 21: 1-4, and John 12: 20-50. In the evening, ascending the Mount of Olives with His disciples, Jesus spoke to them about the events which should occur before His second coming to judge the world (ch. 24, compare Mark, ch. 13, and Luke 21: 5-36). The parable of the Ten Virgins forms part of this discourse.

I. The Warning, 1-5.

V. 1. Then; at the time of Christ's coming, referred to in the previous chapter. Kingdom of heaven; the kingdom which the Messiah came to establish, the kingdom which is the rule of God, whether in the human heart or in society. It exists now, but it has its full realization in eternity. Here the kingdom is regarded as future. Likened unto ten virgins; a round number, as we would say a dozen. Or, perhaps the number "ten" signifies completeness, ten according to Jewish notions constituting a congregation. The ten virgins sum up the whole body of Christians, of whom there are just two classes. The ten virgins, strictly speaking, do not represent the kingdom of heaven, but they who are desirous of entering into it. They stand for those who are in the kingdom, so far as it can be enjoyed on earth, but who are on probation so far as the kingdom yet to come is concerned. Took their lamps. Being saucer-shaped and shallow, these held little oil and, therefore, would soon require refilling. To meet the bridegroom. It is usually supposed that the virgins went forth from the house of the bride's parents, in which the marriage was to be celebrated, to meet the procession of the bridegroom and his friends. Another view is that the bridegroom had gone to the house of the bride to fetch her to his own house and that the virgins had gone out to meet the returning procession.

V. 2. Wise . . . foolish; not good and bad, but prudent and imprudent, thoughtful and thoughtless. No oil; no additional supply. Oil in their vessels; an additional supply in case of need. The bridegroom tarried; an unexpected delay, due to some accident of the road. It suggests some delay in Christ's return. All (wise and foolish alike) slumbered and slept. There was nothing wrong in their sleeping; it was only natural after the long night hours of watching. The Greek is vivid; they nodded a bit, and then fell sound asleep and continued in slumber, perhaps in the shelter of a city gateway. When Jesus comes, as He does to every one at death, he may find us asleep, or busy about our daily work; but that matters little, if we are trusting in and serving Him.

II. The Warning, 6-9.

Vs. 6-8. At midnight. So the Messiah should come (see 1 Thess. 5: 2). Behold, the bridegroom; a brief, rousing cry, heard by all the sleepers. (Compare 1 Thess. 4: 16.) Go ye out to meet him; literally, "go forth to meeting." No words are used that could be dispensed with. Arose and trimmed their lamps; by adding oil and clearing the fibres with a needle. Are gone out; Rev. Ver., "are going out." The foolish virgins were not altogether unwatchful. They were alert, ready for the bridegroom's return.

V. 9. Not so; omitted in the Rev. Ver. The refusal was not expressed, but was implied in the reason given. Let there be not enough. Others connect with what follows: "Let there be not enough . . . go . . . to them they sell." Could oil be bought at midnight? If they went to buy, would they not miss the festivities? As the wedding procession to music and song was very slow, perhaps there was a chance of their buying and being back in time to overtake it. Bruce thinks the wise virgins simply refused to be burdened with their neighbors' affairs. Plummer says that "the refusal of the wise virgins to give of their oil indicates that they did not want of will, but of power. It is impossible for one person to impart to another the spiritual power which comes from frequent communion with God's spirit."

III. The Wedding, 10-13.

V. 10. While. The bridegroom was nearer, or came quicker than even the wise had thought. Went to buy. Compare Prov. 23: 23. There was no question about the ability to buy. The oil, symbolizing a living religion produced by the Holy Spirit (see Ex. 30: 23-25, 30; Ps. 45: 7; Zech., ch. 4) is without money and without price, Isa. 55: 1; Rev. 3: 8. The only difficulty was the lack of time. It was too late. Ready; the word on which the whole parable turns. To be ready here means to be properly equipped. Went in . . . to the marriage; Rev. Ver., "marriage feast." The blessedness of the kingdom is often pictured as a banquet (see chs. 8: 11; 36: 29). The door was shut. The guests were all supposed to have entered with the procession.

Vs. 11, 12. Lord, Lord, open to us. Compare ch. 7: 21. They had probably knocked and met no response; now the fear that they may not be admitted seizes their hearts, and they make a last urgent, desperate appeal. The appeal is addressed to the bridegroom; but it points forward to the Day of Judgment, and the bridegroom becomes the Lord Jesus Christ. I know you not. There is here a picture of those who are strangers to Christ, not belonging to the number of His true disciples, who alone enter the kingdom of heaven. He infers from their not being on time that they do not belong to the guests.

V. 13. Watch therefore; the moral of the parable, a warning not against

sleep, but against lack of forethought, trusting to one's luck. Christ will surely come, when we know not; therefore, be always ready.

Application. 1. The parable of the ten virgins shows how easy it is to miss the golden opportunity, through neglecting preparation. Shakespeare makes one of his characters say: "There is a tide in the affairs of men which taken at the flood, leads on to fortune;"

Omitted, all the virgins of their life. How important therefore, is it to make the right decision? When the war clouds burst over the world in 1914, what if Britain had refused to make any decision? What if Canada had delayed and debated and hesitated?

We are standing at the parting of the ways in Canada, especially in Western Canada, to-day. Shall we commend Christianity to all the people with fresh enthusiasm and power, or shall we drift with the tide?

In one's personal life, too, it is of great importance to seize the strategic opportunity before it elude our grasp. How often men and women regret their wasted years and their lost opportunity for an education gone; the decision for Christian service delayed.

2. The missionary application of this parable. Missionaries tell us that the nations of the earth are in a plastic condition, and that such countries as China, Korea, India, are awake as never before, and open to spiritual impressions. "If we win China, we shall win the world," said a missionary home from Korea, only the other day.

How eagerly young men and women should present themselves for service in these great days! And should not all church members be instant in prayer that God would send forth laborers into his harvest? We are to "watch" the signs of the times, and the indications are that the Orient is ready for the gospel as never before. If we delay, the countries in the East may drift into agnosticism, and the supreme chance of the centuries be missed.

3. The 2nd, 3rd and 4th chances. In the parable the foolish virgins were shut out in the darkness. Their chance never came again. There is a deep and solemn truth in this final exclusion from the light, but in ordinary life we may recover ourselves somewhat. A youth may delay his decision for Christ, and later declare himself on the Master's side. But there is loss of course, and his regret will always be that he postponed his decision. If we have missed the golden opportunity we must be content with the second or third best afterwards.

4. What is the opportunity? It is participation in the divine kingdom. We have our Honor Rolls in our churches and colleges of those who enlisted in the Great War. Shall not the Great Master write down our names, every one, on the Honor Roll of the brave and valiant ones who join God himself as his "fellow-workers" in his task of establishing the kingdom? But what is the "kingdom of God"? It is growing in our midst quietly. It is nothing else than the reign of God on the earth, a reign that is to include all nations, kindreds, tongues; all institutions and societies; all legislation and industry; all joys and sorrows.

There is one rich opportunity before the youth of Canada to-day—the life of definite service in building up the Master's kingdom, and more particularly the career of Christian leadership. We need hundreds of recruits for the ministry. There is no more patriotic and satisfying service than this. It needs preparation. Just as the "wise virgins" took "oil" with them, and were ready for the marriage feast, so our best leaders must equip themselves for the great duty of establishing Canadian life on the foundation of Christ. The "foolish" aspirants for leadership will rush to their task without "oil," without the necessary training and years of patient study. The old question rings out: "Who will go for us?"

Large vs. Small Tractors.

The farmer of the future must be a mechanic rather than a day laborer, remarks D. D. Gray, Superintendent of the Central Experimental Farm at Ottawa in the December number of the Agricultural Gazette of Canada. This, of course, must not be taken in a literal sense, but rather as suggesting that the future agriculturist must combine with a multitude of other things he requires to know, a greater knowledge of mechanics than he has formerly had. Accepting this suggestion as his text, Mr. Gray tells of records that have been kept at the Central Farm on the cost of operating three makes of tractors. The cost of operating the smaller tractor is shown to be greater than the cost of operating the larger, that is in regard to horse-power. The cost of discing with the smaller is shown to be less, due to greater speed possible than with the larger. The cost of plowing with the smaller is more than with the larger. The lighter machine burned gasoline at a cost of 45 cents per gallon and the heavier machine kerosene at 28 1/2 cents per gallon. Cylinder oil cost 85 cents per gallon.

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