

Soils and Crops

By Agronomist.

This Department is for the use of our farm readers who want the advice of an expert on any question regarding soil, seed, crops, etc. If your question is of sufficient general interest, it will be answered through this column. If stamped and addressed envelope is enclosed with your letter, a complete answer will be mailed to you. Address Agronomist, care of Wilson Publishing Co., Ltd., 73 Adelaide St. W., Toronto.

Growing Radishes and Peas.

In no other way can you show your skill as a gardener so well as in the growing of perfect, crisp radishes in the minimum number of days. There are many crops which require to be "hustled," but none of them requires more hustle than the radish.

The composition of the radish is mostly water—the more water you get into it, and the less cellulose (which is the vegetable fibre residue) the better and more crisp it will be, and to accomplish this requires that they be kept growing constantly from the time the seeds are planted until they are ready to pick.

On the other hand, crisp radishes cannot be grown in a heavy soil, nor one which is not kept to the proper degree of moisture. They require what we call a "cool" soil. It should be rich to repletion, and composed very largely of decomposed vegetable matter. Experiments have shown that good radishes can be grown in coal ashes, as a base, with plenty of good well rotted manure, and the addition of commercial fertilizers.

But it is better to grow them in a light, mellow, rich soil. No green or unfermented manure should be used. Arrange for one pound of muriate of potash for a plot ten feet square, for use when the young plants show through the ground. This should be dissolved in water sufficient to give the soil along the drills a good soaking.

How to Plant Radish

Summer radishes naturally fall into two classes; the turnip shaped, and the slender. In the former class we have two divisions, the small "olive" or "button" radishes, which are the very earliest, and the true turnip-shaped which come later on in the season. The slender or, as they are sometimes called, "finger" radishes also come in early and late.

Radish seeds are planted in two general ways. One is broadcast, which is a very wasteful and inefficient way, and the other in drills.

Radish seeds are not too small to plant thin single. With a little care this can be done, and an occasional one dropped in error, can be pulled out when they show through the ground. Make the drills by pulling the dibble along the straight edge, lightly, so as to make a drill not more than half an inch deep, just a trifle less will be better. Make the drills a foot apart for easy working, although if you make them in a double row to be worked by hand, six inches will be for the early ones.

Soil for Garden Peas

Then let us have a goodly row of garden peas; the dwarf ones for first early, the half dwarf for second and the tall ones for main crop. These with succession planting will give peas to eat from the time the first ones are ready to pick in sixty to sixty-five days until the heat of midsummer makes their growth impracticable.

To get the fine results we desire with garden peas they must have a mellow, loamy soil, well filled with humus and enriched with well-rotted manure dug in the trench, and the situation must be one which will

drain well, so no peas of any kind known to our gardens will do well in soggy or swampy soil, even though they require a large supply of water. As one gardener put it, "They will not stand wet feet."

Of the early peas we have two classes—the round-seeded and the wrinkled. The former are from three days to a week earlier than the latter, and are more hardy. However, most persons consider the wrinkled ones so much finer in flavor that they are willing to wait the few days necessary to get them. The wrinkled peas (those which have a wrinkled seed) are sweeter, have more sugar in their composition and rot more easily than the hard-seeded round ones, on which account the latter may be planted first.

Plant in Prepared Drills

I would advise the beginner to await until the soil is well drained, mellow and easily worked, and then plant the wrinkled peas for first early unless his space is large and he desires to try both kinds.

Garden peas should be planted in prepared drills. As the early peas are either dwarf or half dwarf, there will be no need for supports to hold them. A good plan is to plant them three drills together, allowing the vines to mat together. This will prevent the stalks of the dwarf ones falling down, which, especially in wet weather, may cause many of the pods to rot.

The early peas, not having the large mass of roots that the later ones have, may be planted closer together. If you set three rows together make them six inches apart and the seeds two inches apart in the row. The half-dwarf, which may reach a height of thirty inches, may be planted in a double row, the same distance apart, and the vines matted together as soon as they throw out tentacles. This will obviate the necessity for supports.

The aim should be in growing peas to get them all cleared off the vines in not more than two pickings. Most of the seed offered for sale to-day is of strains which have developed this quality under selection. This makes the space occupied by the early peas available for the use of later crops.

Support the Vines

Garden peas should have frequent cultivation and be kept free from weeds. The late ones will do best if mulched when the days get warm, in order to keep the roots cool. Any straw litter will do for the mulching. Put it on and between the rows and water freely. It will also keep down the weeds.

There are a number of materials used for supporting pea vines. The original one was "brush," the twiggy branches of young trees. This is still by far the best. The use of strings, run from poles and brackets, is a rather poor way to support the vines.

When brush is used the rows cannot be so close together as when netting is used. With brush a good way is to plant the rows eighteen inches apart and set the brush between them, making a double row. The next row should be set three-feet from the first, and another double row formed, and continue thus.

In turning cows out of the barn. Ice at the doorway should be covered with cinders to prevent slipping. Do not hurry the animals and cause undue crowding. A slip and fall on the ice can readily result in injury to or loss of a valuable cow.

These things have been said often, but they bear repetition when the cold weather comes with accompanying discomforts. While they accompany more specifically to the dairymen, it is well for all farmers to heed these suggestions and endeavor to keep all cows in milk to help increase the food supply for this winter.

Poultry

Healthy hens are not only on the job when there is something to eat, but they produce the eggs. To get maximum results from the laying flock, it is necessary to keep a constant lookout for the health of the hens. If one gets sick, it had better be removed entirely from the flock. Over-crowding is one of the evils to be guarded against. Each hen should not only have plenty of yard space, but their roosting room should not be crowded. If the hens get over-heated upon the roosts then rush out into the cold for their feed, evil results will undoubtedly follow. The poultry house should afford ample shelter and protection from the elements, but must not be too warm. They require plenty of fresh air and should have clean surroundings.

The feed yard and roosting rooms should be kept clean and sanitary. Fresh straw should be put in the nests. Give them clean water, and wholesome feeds, together with fresh dust baths and feed litter, then their good health will be assured and the egg baskets well filled.



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GOOD HEALTH QUESTION BOX

By Andrew F. Currier, M. D.

Dr. Currier will answer all signed letters pertaining to Health. If your question is of general interest it will be answered through these columns; if not it will be answered personally, if stamped, addressed envelope is enclosed. Dr. Currier will not prescribe for individual cases or make diagnoses. Address Dr. Andrew F. Currier, care of Wilson Publishing Co., 73 Adelaide St. West, Toronto.

Diseases and Hygiene of the Mouth.

This subject includes many important diseases, particularly such as are common in children, and notably diphtheria, influenza, tonsillitis, adenoids and all varieties of sore throat, also diseases of the tongue, teeth, lips, gums, tonsils and salivary glands.

Mouth diseases of adults are less numerous than those of children but are often of grave significance.

Cancer of the lip, tongue or tonsil, is not infrequent; sores of the mucous membrane are the common characteristic of syphilis; suppuration, bleeding gums and loosened teeth, are the marks of Riggs' disease; and many victims of auto-intoxication have abscesses of the roots of their teeth upon which great stress has been laid in recent times.

Repulsive odor of the breath is familiar enough evidence of diseased teeth and gums, of decomposing food in the mouth or of imperfect mastication and disordered digestion.

Some of these diseases originate in the mouth, and others are symptomatic of disease elsewhere in the body.

Cancer of the lip, tongue, or tonsil originates there, but fever blisters on the tongue or lips may be one of the accompaniments of indigestion or gripe or scarlet or typhoid fever.

If we know the cause of a disease, we may be able to treat it successfully, or, better still, prevent it. Because we do not with certainty know the cause of cancer, is one reason why we do not treat it more successfully.

Bad hygiene of the home, poor nutrition, neglect of the teeth, indigestion and many other causes will result in decay of the teeth and diseases of the gums and other tissues of the mouth.

There are many bacteria in the mouth, some are harmful, others are not. In the presence of decayed teeth and decomposed and fermenting food, they are always waiting to jump in and produce disease.

The watery secretion and mucus in the nose and throat furnish splendid media for their multiplication and it is by this means that gripe, tonsillitis, laryngitis, diphtheria, pneumonia and many other diseases are caused, the bacteria extending as they multiply and finally producing the disease peculiar to the dominant variety.

The hygiene of the mouth from infancy to old age is a matter of the greatest importance. The baby's mouth must be kept clean and sweet with a soft rag and boric acid solution, from the day of his birth.

Children should be taught the use of the tooth-brush and the mouth-wash as soon as the teeth appear.

Simple powdered chalk as a dentifrice, and boric-acid solution as a mouth-wash, are all that is needed and they are inexpensive.

Adults should not only use the tooth-brush, but an antiseptic paste or powder and an antiseptic solution for rinsing and gargling.

This will mean better teeth, better health and an absence of offensive breath.

QUESTIONS AND ANSWERS

Mrs. E. S.—1. Can one have gallstones without fever or loss of weight? 2. Will it help to take a bottle of fruitola on the chance that one has gallstones? *Please don't tell me to see my doctor, for I have no funds.

Answer—1. Yes, it is entirely possible. 2. I should say it would not. Why load yourself up with medicine of problematic value and for a condition which may not exist.

O. R. K.—What is the cause of low blood pressure with sunken eyes, and what will improve the situation?

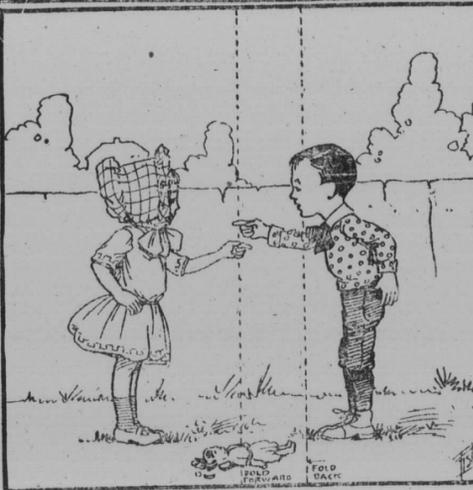
Answer—Many causes are possible, perhaps it is anaemia. If that is the case, you might be benefited by an abundance of food, especially milk, out of door exercise, and perhaps by a good preparation of iron.

It is a patriotic duty of every sugar bush owner to produce every pound of syrup or sugar he possibly can during this crisis. Combined with this duty will be the very agreeable return which will result from the labor for the sale of the syrup or sugar, for there can be no such thing as an over-production of maple products during the duration of the war at least.

Few people realize that our song birds, or insectivorous birds, are a real asset and will do as much as any other thing to help us win the war, by protecting our crops and gardens from injurious insects.

FUNNY FOLD-UPS

CUT OUT AND FOLD ON DOTTED LINES



Come, Willie, this will never do. We'll have no quarrel here with Sue; You say you're very sorry, then Go kiss her and be friends again.

The Sunday School

INTERNATIONAL LESSON
FEBRUARY 24.

Lesson VIII.—Jesus Teaching By Parables: The Growth Of The Kingdom—Mark 4, 21-34. Golden Text, Isa. 11, 9.

Verse 21. The crudest form of lamp used by the peasants is a terra-cotta saucer with its edges pinched together, to make place for the wick. Light is not to be covered up, but to be set forth. The word given by the Master is not to be kept in secret, but to be sent abroad to others. The things of the Kingdom are not mysteries to be hid away, they are not secrets which may not be understood. On the contrary, they are to be made known for the illumination of men. "Ye are the light of the world." The Christian life is not to be cloistered, but to shine forth. Not a nunnery or a monastery, but the highways of men is the place for a Christian disciple.

22. That it should be manifested—Truth is for great ends. Eventually it is to come forth so that the world may share in the revelation. This manifestation is not sudden, but silent and gradual, from a faint glow on the horizon, until the heavens are filled with the light.

24. Take heed what ye hear—If you wish to know the mysteries of the Kingdom give careful attention to the word that is taught you, and inconsiderate or thoughtless hearers.

25. He that hath to him shall be given—This is a fundamental law of the Kingdom. Knowledge grows from more to more. The gift of insight, when used, brings larger insight, while failure to seek to know leads to the blunting and deadening of the power to perceive the truth. The only condition for knowledge of the truth is seeing, knocking, asking, and ever searching. Thus there is an ever increasing richness in the life of the inquiring soul. A man who has much knowledge will be continually adding to that knowledge, and on the other hand, he who has but little, unless he add to it his store will tend to decrease.

26. As if a man should cast seed upon the earth—This parable is peculiar to Mark. The interest centres here in the seed, which has life in itself and will produce according to its own laws if only it be given an opportunity.

27, 28. "Should sleep and rise night and day—He has done all he can do when he casts the seed into the soil, and can now only go about his usual duties, leaving the seed to mature, to the sun, air, and rain.

29. When the fruit is ripe—When the process is completed comes the harvest. Thus the kingdom of God grows, silently, secretly, by orderly and successive stages, a spiritual order moving according to its own laws and reaching marvelous results.

30. How shall we liken—All nature may be laid under tribute to illustrate the spiritual movement of the kingdom of God and become full of symbols of spiritual realities. We are not to think of the natural world and the spiritual world as two separate and distinct kingdoms. Rather the entire universe is spiritual in that back of all is God, who is not outside of nature, but present in his world, overseeing the steady development of his kingdom.

31. Like a grain of mustard seed—In the earth. In Matthew the seed is sown "in his field" (13, 24). In Luke, "in his garden" (13, 19). The seed is not indigenous to the soil, but it comes from without the soil. The kingdom of God is not of human origin, though the divine germ must develop in human life and civilization. Less than all the seeds—With the seed "small as a grain of mustard seed" was an expression for something exceedingly small. The ordinary mustard plant as we know it is seen to-day in the fields about the sea of Galilee.

32. Great branches—This mustard plant, however, must be different from the plant described in the text. Some writers tell of a mustard tree in Judea which attains to a great height, "as tall as the horse and his rider."

33. Many such parables—Of which Mark gives us only a selection. Small in its beginnings, silent and gradual in its unfolding, great in its consummation—like the mustard seed—such is the kingdom of God. They were not to despise the insignificant beginnings, for great was to be the future of the small seed placed in the human soil by the divine Sower. What madness to send forth a group of unlettered peasants to conquer the world! Yet, behold to-day, the out-spreading branches of the kingdom of God in the earth!

34. Without a parable spake he not unto them—Not that he limited himself thereafter to parabolic teaching. Expounded—How careful he was that they should understand his great mission! Yet, they did not and could not fully grasp the significance of his wonderful message. "Ye fools and slow of heart to believe" was the language he used even during the last few days he was with them. It was at this same interval that he said to them, "I have many things to say unto you, but ye cannot bear them now." They were to wait for another expounder, the Holy Spirit, who was to take up his message and show them its supreme significance.

A Floral Umbrella.

One of the prettiest garden growths seen last year was a Michaelmas daisy. Its main branch was tied to a stake, laterals removed and the upper branches trained upon an old umbrella frame, which it completely concealed. The pendulous branches were ropes of little roses with large golden eyes and finely cut petalage an inch in diameter.

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Horse Sense

Care of the Feet.

Every farmer should understand the important relation existing between the feet of his horses and their value to him as working machines. He should watch them carefully and exercise every precaution possible to keep them in first-class condition.

A horse's hoof corresponds in a general way to the toe and finger nails of human beings. It is made up of a corneous material that protects the more sensitive parts of the foot from more sensitive parts of the foot from injury. Like the finger nails of some people, some horses' hoofs have a tendency to dry out and become hard and brittle, thus breaking and cracking, while others are tough and resistant to wear. The value of the animal is largely determined by the kind and character of his feet or hoofs, and no two horses have hoofs exactly alike.

On an average, a horse's hoof grows about one-third of an inch a month, some faster and some slower. The hind hoofs grow faster than the fore hoofs, and unshod ones grow faster than those that are shod. The toe of the hoof will grow down in from nine to twelve months, depending on its length, the quarter in from six to eight months, and the heel in from three to four months. Some hoofs grow irregular and must be given attention from time to time. In unshod horses and colts it is often necessary to trim off the uneven edges with a knife and rasp to prevent breaking and cracking. Colts should always be given plenty of exercise on dry ground so their hoofs will wear off even. Foul stables will do much to ruin a young horse's feet.

Horses are shod principally to protect their feet from wear and to increase their efficiency as beasts of burden. Shoes should be renewed as often as necessary and they should be designed to fit the particular needs of each animal. A good farrier is one anatomy of the foot and knows how best to correct its imperfections. who thoroughly understands the

The Typewriter.

About as useful a present as a parent could make to a six-year-old boy or girl is a second-hand typewriter, both from a standpoint of amusement and education.

With a typewriter a child learns to spell, read and compose sentences without knowing it—the element of interest is added to learning, which is the very best kind of education, because it develops the will, the desire to do, along with the development of the intellect.

Then another thing, the typewriter is to-day a universal implement in business, and it is becoming to be so on the farm and in the household.

The typewriter is simply a device for more efficient expression and by its use the facility of efficient expression will become more universal.

Many classes of men of good education and of fine training, both in mind and hand, are denied an extended facility of expression by reason of the fact that they do not write legibly, often times the very nature of their training and employment prevent the skilled use of the pen or pencil in writing.

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This Big Doll is 15 inches tall, has a jointed legs and arms and natural head, hands and feet. The Doll Carriage has steel frame and wheels and the seat, back and hood are made of leatherette. It is 24 inches high and is just the right size for the Big Doll.

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