

# Soils and Crops

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 Carrots, Beets, and Spinach.

For some unexplained reason the carrot does not seem to be as much of a home garden vegetable as some others which have not so much food value and are not as toothsome or enjoyable in as many ways. I have noticed this to be the case in many parts of the country, and yet it is very extensively grown by market gardeners and must be eaten by many in the cities.

To get a well-grown carrot special attention must be given to the soil, which should be light in texture, very fertile, deep and warm.

The carrot has a long growing season. The early ones may be sown now and others successively through the months of May, June and the first half of July in such quantities as will give a summer supply from the first plantings, and from the later ones what is desired for winter.

Cover the seeds thinly with fine soil, and to make sure of a good contact between it and the seeds tread along the row to make it firm, especially when planting the late ones, when the soil may be somewhat dry. Keep watered enough to maintain an even moisture, which will hasten germination and insure a more even crop. The carrot should be grown quickly to insure freedom from toughness of the centre.

## Culture of the Beet

The beet should have a soil made of fibrous loam, well drained and well enriched with good rotted manure. It is one of the crops which should have a quick and uninterrupted growth to insure tenderness, and this can best be had in such a soil.

An ordinary garden soil which may have a clay base may be made better for beets by being dug deeply, chopped fine, worked into condition with the rake, and have a heavy dressing of rotted manure dug into the trench. If feasible to do so, heavy soils may be lightened by the addition of sharp sand applied when the soil has been dug and worked in with the rake.

The first early beets are raised from plants grown under glass and set out at this time. These plants are not expensive, and several dozens will be sufficient for the ordinary home garden. When buying them be sure that the slender taproot is not broken off, which is sometimes the case when they are not carefully lifted from the flats, or indoor seed bed.

The main-crop early beets sown outdoors should be planted where they are to mature. It is customary to set them around the edges of the beds, as well as in the beds themselves. They make a good edging for the beds of almost all vegetables, and this makes for economy of space. The practice of making a hole with a stick and dropping in the seeds is not a good one, as it is difficult to provide close contact between the seed and the soil, something which is very necessary.

The best plan is to sow the seeds in drills one inch deep. These can be made with the hoe, which is better than the back of the rake, as it does not pack the soil in the bottom of the drill. Set the seeds an inch apart, in order to get a good stand, as some may not germinate, and when they have gained their third leaf they may be thinned out to two inches apart in the row.

These plants are allowed to remain at this distance until the leaves touch.

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## Sheep Notes

### Lessen the Lambing Losses.

Several weeks before lambing time, ewes are best divided into lots according to the time their lambs are due. Crowding around feed boxes, jumping over ditches, pushing through narrow gates and rough handling when trimming the feet are likely to cause ewes to cast their lambs.

Immediately before and during lambing time, the herdsman needs to be on the job night and day to prevent the loss of lambs from chilling and from other preventable causes. As soon as a lamb is born the herdsman will clean the mucus from its mouth and nostrils. If the lamb is brought to the ewe she will clean and dry it. If she refuses, a pinch of salt sprinkled on the lamb will help to overcome her backwardness. In an hour or two, if the lamb is too weak to suck, it should be helped.

when alternate ones may be removed and used as beet greens, or sauce, tops and all. This is a great delicacy when properly cooked and dressed with butter and seasoning.

From the time the beets come through the soil (sooner if the weeds get the start of them) give thorough and clean cultivation. Break the crust which forms after all rains and keep up the dust mulch.

The best stimulant for the early beet is nitrate of soda, at the rate of 100 pounds an acre, which works out for the small garden in the proportion of one-third of an ounce to a yard square of soil. It is applied by dissolving in water to an ounce of the nitrate of soda, and watering along the rows and not all over the beds.

## Some Edible Greens

Foremost among edible greens is the spinach. This is one of the most important crops of both the commercial and home gardeners, yet it is not always as choice as it can be made to be by proper culture. By some it is regarded almost as a spring medicine, having a diuretic effect. When properly cooked and served it is both nourishing and appetizing.

Spinach is an early summer and fall vegetable, being not up to quality in midsummer, as it will not stand the excessive heat and dryness of our northern climate.

For spinach the ground cannot be too rich. It will give best results when light and porous. The richer the soil is, the more delicate and succulent the leaves will be and the finer the flavor.

It is best when planting spinach to drop the seeds rather thickly to insure a good stand, the surplus to be afterward thinned out to six to eight inches apart, according to the maturing size of the variety grown.

Another good green and salad plant is the upland cress, which is also a stranger to most gardens than it should be, as it makes a most appetizing salad and greens, when used as spinach is. Should be sown in rich moist soil and have free cultivation. Sow it thickly in drills, six inches apart, to force leaf growth. Frequently small sowings are best, as it soon runs to seed if left stand.

## The Wholesome Endive

For a fall and winter salad and greens plant there are few the equal of the endive, and it is one of the most wholesome of them all. For late use make sowings in June in the seed bed or out of the way place, and when three inches high transplant into the garden beds (where some early crop has been removed) a foot apart every way. Keep growing all summer by regular watering and continuous cultivation, and when mature in the fall blanch by tying up heads in waterproof small paper bags, when they are dry. If done when they are wet the heads will rot. They can be taken up, root and all, and stored in a dry, cool cellar and kept several months.

It would seem hardly worth while to advise persons to plant dandelion, as this so-called weed is so widely distributed as a pest. Yet few persons have any idea as to the great superiority of the cultivated sorts over the common wild dandelion when used either as a cold salad or as boiled greens with a sour dressing.

Heat is the best medicine for weak lambs. If the shed is cold, warm woollen cloths wrapped around the yearlings will put heat into their bodies. The cloths need to be changed as soon as they lose their heat. It may be necessary to feed weak lambs by hand, giving a spoonful of the mother's milk every few hours. The ewe and her lamb should be kept in a pen by themselves for a few days until the lamb becomes strong.

Insecticides will surely be needed by gardeners and fruit growers. Dealers should obtain ample supplies and have them on hand ready to meet the demand so growers will not be kept waiting until a good part of their crops have been destroyed and growers should place their orders immediately, having the goods delivered as early as possible. Plant lice should be counted on again this year. Be fully prepared.

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## Horse Sense

Constipation causes much suffering and loss among horses fed principally on timothy hay and corn. A little oilmeal, some alfalfa or a little clean silage daily, or a tablespoonful of Epsom salts every day or two in the

feed, will regulate the workings of the intestines.

The tendency of mares to fatten as pregnancy advances during the winter must be guarded, else the mares may become so fat as to interfere with the development of the foal. Abortion may result from failure to guard against this condition.

Good grain rations for colts the first winter are: Two parts corn, five parts oats, three parts bran, and one part oilmeal; or four parts oats, one part corn and one part bran.

The cheapest animal to raise is the sheep.

## NUTRITIOUS SCHOOL LUNCHES

By Caroline L. Hunt

The lunch at school has long been considered by thoughtful people a good opportunity to teach the composition of foods, the principles of nutrition and the best and safest ways of handling and preparing foods. Now that everyone is interested in food conservation and is ready and willing to do his bit in the way of saving, the educational opportunities of the school lunch are increased many fold.

This is particularly true in cases where part of the lunch is prepared at school either in connection with the course in Home Economics or otherwise.

To begin with the school lunch can be made a means of teaching one of the simplest and least complicated facts about foods—their fuel values. Every child knows the difference between a good fuel and a poor fuel. He knows that green wood does not burn well because it contains much water which must be driven off before the combustible parts of the wood can be used.

He knows that a piece of hard coal of given size gives off more heat when it burns than a piece of soft wood of the same size even when the wood is dry. If burned in an engine the coal will produce more power and do more work. It may be said, therefore, to have more energy or more power stored up within it. As a rule, however, even in times of peace, it is thought much more economical to use wood near the place where it is grown and to carry coal which is far less bulky to distant places where fuel is needed.

Foods of various kinds, milk, meat, eggs, wheat, potatoes, apples, and others, are the fuels of the human machine. They burn within it and provide it with the power to walk, run, or to take long trips as soldiers often have to. Some are bulky and some are concentrated fuels and it is the concentrated fuels that we are trying to save for transportation as far as possible.

An interesting class exercise can be made by asking pupils to pick out from lists of foods those which provide the greatest amount of fuel or energy per pound.

There are many ways in which potatoes can be used in the school lunch—potato salad can be carried in the lunch basket. This is easy to prepare, for salad dressing can always be kept on hand and extra potatoes can be cooked when dinner is prepared.

Great variety can be secured in potato salad by varying the flavoring material. Almost any vegetable can be combined with the potatoes. The egg-yolk and skim milk dressing mentioned here offers a very good way to use egg yolks which are good food for children.

**Egg Yolk and Skim Milk Salad Dressing**  
1/2 tablespoonful salt, 1 tablespoonful sugar, 1/4 cup vinegar, 1/2 teaspoonful mustard, 1 1/2 cups of egg yolks and skim milk (4 to 8 yolks, the rest milk). Rub together the dry ingredients so as to get the lumps out of the mustard. Add the other ingredients and cook in a double boiler till the mixture thickens.

A good dish to prepare in school is creamed potatoes, for it requires few utensils. If stove-room and time are limited, the pupils can bring cold boiled potatoes in their lunch boxes and the white sauce can be prepared at school.

This dish offers a good means of bringing a little milk into the school lunch and gives the teacher a chance to show that other fats than butter can be used in cooking. Any whole-some fat—beef drippings, chicken or bacon fat, can be used and skim milk can be used in place of whole milk.

Like potato salad, creamed potatoes can be varied by combining the potatoes with other vegetables—peas, beans, carrots, turnips, and so forth. Curry powder gives variety and is not unwholesome if used in very small amounts.

## Curried Vegetables

3 cups cold boiled potatoes cut into dice, 1 cup peas, carrots, turnips, or other cooked vegetables, 1 sliced onion, 1/4 cup fat, 1/4 cup flour, 2 cups milk, whole or skim, 1/2 level teaspoon curry powder, 1/2 level teaspoon salt. Cook the onion in the fat, being careful not to brown it. Take out the onion and add the flour. Cook two or three minutes. Add the milk and cook till the mixture thickens. Add the vegetables and the seasonings and reheat.

Savory stews in which the flavor of a little carefully browned meat and of onion or other highly flavored vegetables is extended through a large amount of potatoes are too well known to be described here. They are acceptable dishes on cold days at school.

So far we have spoken of the use of potatoes as a means of saving wheat. The intelligent child will be likely to ask why wheat should be conserved rather than other cereals, oats, corn, rice, and so forth. One answer is that wheat can more conveniently be made into bread than the others and most people feel aggrieved unless they can have part at least of their cereal food in this form of bread. They are willing to eat some in the form of breakfast foods but not all. The time has come, unfortunately, when if everybody everywhere is to have bread every day, we in Canada, must economize on this great breadmaking cereal, wheat.

The reason why wheat can be made into bread more easily than other cereals is because it contains gluten. A good class exercise consists in making the gluten out of wheat flour. Directions for doing this can be found in any good text book on foods. This might be followed by an effort to find gluten in rice, corn flour or in flour made from other cereals. It will be a failure of course but it will be enlightening.

Many ways of using other cereals so as to reduce the amount of wheat bread needed will occur to mother and teacher. Boiled rice can easily be carried in the lunch basket or prepared at school. When eaten with milk, syrup, honey or stewed dried fruits, it makes a good war-time dish. The rice saves wheat, the milk saves meat, and the honey or fruits save cane sugar.

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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.

## Varicose Veins

When a bunch of veins which have been inflamed and swollen break down and become a running sore, it is a varicose ulcer.

Varicose veins are simply enlarged, dilated and sometimes thickened veins.

They may not cause very much trouble or they may become inflamed and give rise to all the symptoms which attend the disease known as phlebitis.

They may be superficial or deep, or both, and when they are deep it is not easy to make the diagnosis.

A number of veins or only a single one may be varicose, appearing as dilated, knotted, bluish cords, sometimes hard and sometimes soft.

They are usually on the lower extremities, but may extend to the abdomen, especially when the circulation in the veins of the abdomen is impeded, for example, by the pressure of an abdominal tumor or a deformed child in the later months of pregnancy.

Veins are poorly supported by the tissues surrounding them, their walls are thinner and less resilient than those of the arteries, and the venous circulation always has to work up hill, against gravity.

For a partial safeguard they have valves at short intervals to prevent back-flow of the blood, this tendency being great in those having weak hearts, weak or flabby tissues and who stand all day at their work.

There are people the veins gradually get dilated, the valves knotted. Sometimes these veins get hard and thick, and the circulation makes new paths for itself, like a brook whose channel is obstructed. Or the pressure of the struggling blood-current forces the blood serum into the surrounding tissues, making them thick and hard until a slight injury or even continued pressure results in the sluggish sores which may not heal.

There may also be eczema or other skin eruption around the ulcer and there may be hemorrhage from time to time.

Sufferers from varicose veins tire easily, and may be unable to do hard work.

Among them are clerks, bookkeepers, house-servants and others who have little active, muscular work.

Women who wear tight garters or lift heavy burdens often get varicose veins, also sufferers from obstructed circulation in any internal organs.

Bear in mind also that inflammation or abscess of the veins is always a possible consequence and the result may be painful, serious, or even dangerous to life.

In the minor degrees of this disease there may be only moderate annoyance with a feeling of inability to bear the customary task.

But even such cases must receive attention or they will rebel and be troublesome.

The external support of a rubber bandage, carefully wound from toes to knee is most comforting to these sufferers.

It should be removed and cleansed with an antiseptic solution at night and re-applied the next morning.

If the veins are enlarged and painful, rest for a week or two, lying on a couch by day, with the foot elevated at least six inches.

Should actual inflammation occur, rest in bed is imperative with elevation of the foot and the constant use of antiseptic lotions.

Should suppuration occur, the abscess must be freely opened and drained.

## QUESTIONS AND ANSWERS.

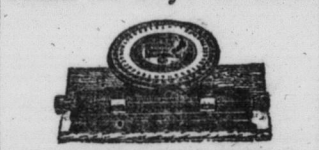
W. K., Jr.—Is there any cure or relief that you know of for asthma?

Answer—There are many ways of relieving this annoying trouble, though the only way that I know of to cure it is to change one's residence to an elevation of at least 2,000 feet. Cigarettes of cubebs, rolled in nitrate of potash paper, are often used with relief when one has an attack of asthma. Also, relief may be attained by inhaling the smoke from burning stramonium leaves. Even inhaling simple steam will sometimes bring relief and break the spasm. But the most effectual relief is found in a change of residence.

To preserve the color in black stockings, wash them with soap that is free from soda, and add a teaspoonful of vinegar to the last rinsing water.

Tomato seeds may be started in the house the middle to the last of February for early plants. Keep the plants growing slowly to make them low and stocky. Too much heat will develop tall, spindling, undesirable plants.

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## PREPAREDNESS

"What kind of man are you going to marry?" asked earnest, dark-haired Margaret Ellis.

Her friend, Vivian, raised her golden head. "I want the man I marry to be entertaining, to be high in his profession, to have money, or the hope of getting it—the kind of man that everyone is anxious to know. That kind could make me happy. Just any man wouldn't do. I couldn't marry just any man."

Grandmother Ellis looked up from her crochet. A quizzical look crept into her eyes as they rested on Vivian's attractive face. Then she folded her capable hands in her lap and said:

"Can you cook, Vivian?"

"Why, yes, a little. I can make mayonnaise, cake, and—oh, fudge," she answered, looking puzzled over the seeming irrelevancy of the question.

"Can you sew?"

"No, but I can embroider."

"I see. Of course you can keep house?"

"No, Mrs. Ellis, I cannot. The maid does that at our house."

"I see, I see," mused grandmother. She gazed out of the window for a minute, and when she looked back her eyes were very kind.

"Yet, my dear, you expect to marry some one who has used his time well in making a successful man of himself. He must be so well-trained that he will make no mistakes that might cause you discomfort or unhappiness. He must stand the strain of the long days, and the responsibility, not only of his work, but of his own family—and then be entertaining. I wonder often whether women realize just what that means. You, on the contrary, know nothing of your business of being a wife. You enter on the biggest job in life without training. You will learn in time, perhaps; but at the expense of his comfort and of your own. The petted-doll way of home-making is marked with tears and regret. Do you think it is quite fair to ask so much and give so little?"

As Grandmother Ellis talked, a flush had risen to Vivian's face; but plenty of sense lay behind her beauty. She drew a long breath.

"Thank you, Mrs. Ellis," she said sincerely. "I have never thought the thing out before. You have given me something that I shall profit by."

## The Topsy-Turvy Concert

The mother who suddenly finds herself the centre of a group of boys and girls who importunately ask that old question, "What shall we do now?" will do well to propose a topsy-turvy concert. It is always full of fun for the children who take part in it for the first time.

Stretch a curtain across one end of the room, low enough so that it comes just below the chin of the smallest child who is to sing in the concert. Behind the curtain the children put shoes and stockings on their hands and arms. Then, with hands at their sides, they stand and sing the first verse of whatever song is chosen. When they begin the chorus the children drop from sight, and at the same instant all lift their hands above their heads while they continue to sing the chorus. It looks to the audience as if the young musicians were standing on their heads, and is always a laughable performance.

Perhaps some child will forget to drop down with the others and will stand during the chorus, apparently with both feet beside his smiling face. That is even funnier than doing what was expected of him. If there are enough children, you can divide them into two companies and let each group have an opportunity to be now audience and now singers.

## English Hedges To Go.

One of the pretty features of the English landscape will undergo drastic changes as a result of the great agricultural programme this year. Hedges in many places will have to go down and thousands of trees which have wide spreading roots must be removed to allow ploughing. It is believed by many that the result after the war will be the adoption of the Canadian style of landscape, with lawns minus fences and hedges surrounding homes.

Early cabbage, lettuce and radishes may be sown as soon as hot beds are ready.

Sponge the foliage of all broad leaved plants, such as palms, camellias, aspidistras, rubbers, etc.

Trays which are about two or three inches deep and similar to the shallow wooden boxes used by Canadian gardeners, called flats, are filled with early potatoes by English gardeners, with the seed or eye end up. These are kept in full light without heat. Immediately before planting all the sprouts except one are removed. The tubers are then planted from one to three in a pot, according to the size of the pot. At first the pot is only about half filled with earth and is gradually filled up as growth progresses. Finally holes are made in well-prepared soil in the garden, to which the potatoes in the pots are transferred without disturbing the roots. The object is to obtain an early crop of potatoes.