

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.

A.D.—Which would be better for sandy loam, to spread well rotted manure on this fall or in the spring? Would it be advisable to use fertilizer on such land in the spring? This land is level and well drained, intended for potatoes.

Answer—I would advise putting on the manure in the spring. Be sure to store it protected from the rain and snow; otherwise you will lose a lot of the available plant food by leaching. In order to get largest yields of best quality next spring, you will do well to add fertilizer to this soil. In tests at Fredericton, New Brunswick, last year, the Experimental Farm got an increase of 69 bushels and 33 pounds of carrots per acre by adding 650 pounds of fertilizer to the acre along with 30 tons of manure per acre. This increase was in addition to that obtained by the manure alone. In the same test, the addition of fertilizer to manure returned a gain of 124 bushels and 44 pounds of carrots to the acre. Potatoes require largely the same type of fertilizers as the foregoing crops. The addition of sufficient fertilizers will undoubtedly give you good results.

H. B.—1. What would you advise sowing on low land to give permanent pasture? 2. Could you give me culture directions for lentils? 3. What will rid a field of twitch grass?

Answer—1. For low land grass for permanent pasture, I would advise you to sow a mixture of:

Red top 10 lbs.
Timothy 4 lbs.
Alsike clover 4 lbs.
White clover 2 lbs.

Total 20 lbs. per acre

If possible, provide suitable drainage. 2. Relative culture of lentils. French advises a light and dry soil. Grow the lentils in rows about 18 inches apart, planting them 3 inches apart. The seed is planted about an inch deep on

a well prepared seed-bed. Considerable care must be given to the cultivation of the crop. When the plants turn yellow, harvest the whole plant, leaving the beans in the pods. If they are threshed out, the lentils do not store so well. 3. To get rid of twitch grass or quack grass, it requires persistent care. Various methods are recommended. Some get good results by giving the soil good preparation and then seeding it to a very heavy seeding of rape, millet or sorghum. The idea is to smother out the grass. Others get good results by summer fallowing, raking up the pieces of roots, drying and burning them, as often as the material can be gathered.

Subscriber—I would like your opinion of alfalfa sowed on disked bean ground in the spring. Do you think land should be plowed?

Answer—If the land where your beans were grown last year is of a clay type, it should be plowed in the spring in preparation for a seed-bed for alfalfa. It is almost impossible to give too much care in preparation of the soil when alfalfa is to be grown. It might be of interest to you to know that on the Cornfield Farms, Waukesha, Wisconsin, where approximately 300 acres of alfalfa are grown on a 500-acre farm, greatest care is given to plowing, disk and harrowing the soil. Swartz Brothers, the operators, report that at seeding time they also apply from 400 to 600 pounds per acre of a fertilizer carrying 2 per cent. ammonia, 8 per cent. available phosphoric acid, and under normal conditions 2 per cent. potash. This additional available plant food gives the young crop a vigorous start. The Swartz Brothers have been growing alfalfa for the last twenty years and have made an extensive crop of it during the last ten years. It is no uncommon thing for them to cut from six to seven tons of excellent alfalfa hay per acre.

The Dairy

All other kinds of farming are more or less of a gamble, but the man who is in dairying is reasonably sure of a fair return for his labor and capital.

There is no sure way of telling what a cow is capable of except by weighing and testing the milk. There is no connection between the length of the tail and depth of the milk pail the cow will fill. Some of our best milkers have been top-tails. At the same time a wide space between the back ribs is a good thing to look for in buying. The main thing, however, is depth and width of rib and space between ribs and hips. This indicates capacity to store and digest food. The "milk veins" are also important.

If you want large milk yields you must have a fairly large cow. Other things being equal, a large cow will produce more, at less cost, than will a small cow. If you killed a cow which was giving three gallons at a milking you probably would not find more than that many quarts of milk in her udder. The milk is produced while the process of milking is going on. The act of milking transforms tiny cells in the udder into the form of milk.

Every dairy farmer should test his cows and weigh their milk. He should do this for his own satisfaction; a cow, proven as to capacity by test, will sell for two or three times the price of an unproven cow.

Hubbard squash and cabbage make excellent green winter feed for hens. It is just as important to provide green feed and animal feed for hens in winter as it is to supply a milch cow with roots, silage and chop to make her milk.

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Horse Sense

The old horse, if given proper care and treatment will in almost every case stand as much hard work as the young animal and, considering the price of horses at the present time the old horse is worth just as much to the farmer as the young horse, as far as work is concerned.

Of course if the old horse is offered for sale he will not bring as much as the young one, because the most of his life lies in the past, however, considering everything if he is given the proper care he will pay his way and be a profitable and faithful servant to the farmer.

With many, as soon as a horse begins to grow old, say from 12 to 14 years he is neglected and does not receive the care he should have, nor the care that he was given when young. He is no longer groomed as regularly and thoroughly as formerly. When not in use he is left to run in the pasture during all kinds of weather, and if a little crowded for stable room he is many times left out for the winter to find a place of shelter around the old straw stack, or behind a bank some place.

Many times the old horse does not receive the kinds of feed that are best for his particular case and, if the teeth are a little long and this is often the case with the old horse, he cannot grind the feed as he did a few years past. When the old horse has reached this stage he cannot masticate his food as it should be, consequently a portion of it does him no particular good.

Then again it must be remembered he will require a longer time to eat his feed than when young. Unless some ground feed is given him and he is given sufficient time to eat it when being worked, he will fail to get the full benefit of his meal, and in a matter of a very short time he will begin to lose flesh and will no longer present the fat, sleek appearance of former days.

It is obvious therefore that if the horses are to be serviceable until a good old age, they must receive as good care and treatment, if not a little better, in their declining years than when they were young. They must not be neglected whether at work or not.

The Melting of the Bells.

They have taken the bells of Flanders And melted them into guns, They have branded the bells of Flanders And trained them on her sons.

The tower of Bruges is silent, And widowed shall she stand; No more shall the voice of Roland Sound "Victory in the land!"

Proud Ghent and prouder Antwerp Are silent on the Scheldt; They have hunched the bells of Flanders— Art sleeping, Van Artevelde?

Now this is the condemnation That follows them through the years, That they shall be blind to beauty And they shall be deaf to tears.

And through the coming ages, When wonder and we are theirs, Forever the bells of Flanders Ring louder than their prayers.

—Mary Eleanor Roberts.

Three-quarters of a child's growth takes place during sleep. Beware of the solicitor who offers remedies to be put in holes bored in trees for the purpose of destroying insects or disease. Direct application by spraying is the only preventive discovered up to the present time.

Sheep Notes

If you are breeding for speed, mate long-legged males and females. Most of us would not care for that kind of sheep on our farms. We do not want fence jumpers, but quiet, yet vigorous sheep. For this, sheep with short legs and compact bodies are best.

Every year or two some one suggests that the forests be used as sheep or goat ranches. The foresters say it is impracticable. Why not use farm pastures instead?

A narrow gateway for sheep leads to a big lot of trouble.

A sheep corral is nothing less than insurance against sheep-killing dogs, which have constituted one of the greatest obstacles to sheep-raising. Sheep may be driven into the corral at night, since sheep losses usually occur at night.

Be sure there are no ticks on the sheep when they go into winter quarters. It will cost good money to winter a lot of ticks and there is no profit in them.

A ticky flock will come out skin poor in the spring no matter how you feed.

Lambs make greater gains in feeding than old sheep. Hence it would be unwise to prohibit the slaughter of lambs.

Ewes due to lamb in the latter part of winter or early spring should be given nutritious food for toning the system, developing the young and growing a coat of wool. Nitrogenous foods, such as oats, alfalfa and bran, are valuable for that purpose.

The Tool Box In The Kitchen.

"Every well-appointed kitchen has a tool box all its own," declared one housekeeper, who says frankly that she gets more pleasure out of work done in her kitchen than that which is necessary in any other room in her house. "I am talking about housework, you understand, not about reading or studying or playing the piano or anything of that sort," she explains.

"One thing which I consider an absolutely necessary part of the kitchen paraphernalia is a tool box. Mine, which really is a deep drawer over a built-in cupboard, contains two chisels, a large one and another smaller, a funny little tool the name of which I have forgotten, but it is a wooden handle with a lot of queer little things that can be fitted into the end of it for various purposes, a saw, a large screw driver and a small one—and there are two still smaller ones that belong to that handle full of tools that I mentioned—a monkey wrench, a pair of tweezers, a plane and a few other little things which any amateur carpenter or real one needs at various times.

GOOD HEALTH QUESTION BOX

By John B. Huber, M.A., M.D.

Dr. Huber 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. Huber will not prescribe for individual cases or make diagnosis. Address Dr. John B. Huber, care of Wilson Publishing Co., 73 West Adelaide St., Toronto.

Cut out worrying; it helps disease to develop.

WHOOPIING COUGH.

In England whooping cough—pertussis—occasions more deaths than does measles or diphtheria or scarlet fever or typhoid fever. 800 of our own children die annually of it. Nor is this taking into account the diseases which may be complicating or sequel to pertussis—emphysema, hemorrhages into the brain, hernia, bronchopneumonia, mastoid abscess, tuberculosis.

Whooping cough is even more serious for adults. In old people it has been fatal in itself or it has led to the development of such "terminal ailments" as pneumonia. Pertussis comes oftentimes in epidemics, which vary greatly in contagiousness, intensity and mortality. The specific germ is spread, just as in diphtheria, in the secretions from the mouth and the nose that are sneezed (and thus atomized, or sprayed out) coughed and spat out, or carried about in handkerchiefs, on toys, drinking cups, roller towels and the like, which people who come in contact with the patient handle. Except for the droplet infection which results from sneezing and coughing (and which is always to be obviated by the handkerchief or other cloth held before the patient's mouth and nose during these acts) pertussis is not an air-borne infection. The infection is got either directly (by contagion) in kissing and the like; or indirectly, as from toys and the like. It is a person to person infection; and the germ is not likely to live and be noxious more than several days out of a living body. He who keeps beyond speaking distance of the patient is not likely to be affected. The

pertussis incubation or hatching period (the time between exposure to the infection and when one shows the first symptoms) is from a week to a fortnight. If sixteen days have passed since the exposure there is no occasion to worry.

QUESTIONS AND ANSWERS.

Subnormal Temperature.

Will you kindly advise me if anything can be done for subnormal temperature of one and one-half degrees. I am 55, weigh about 160, work inside, do not drink, use very little tobacco, sleep fairly well. I had a nervous breakdown 15 years ago from overwork, worry and other causes.

Answer—Subnormal temperature may be occasional and not serious. If persistent the reason is it is due to alcoholism, melancholia, inanition, wasting diseases and chronic poisoning in dangerous trades. A persistent subnormal temperature of one and one-half degrees is a more momentous matter than the same above the normal. You should have your family doctor give you a good overhauling. I am sending you the principles of the Hygienic Life. Leading that should help considerably. Almost all indoor workers suffer from lack of exercise.

Blood Pressure.

Do you think a blood pressure of 125 serious? Answer—No. But it is below par, slightly. It should be about 140. The conditions your doctor mentioned (15 pounds under weight and anemia) would account for the reduced pressure. Leading the Hygienic Life should help greatly to your restoration.

A Story from Galicia.

A good story is told concerning Commander Locker-Lampson, whose handling of the British armored-car section on the Eastern front during the Austrian-German advance in Galicia called forth such warm praise. During the height of the Russian retreat, when our allies were streaming away eastward, one of his Tommies was overheard enquiring somewhat anxiously of another who were our rear guard.

"Those who have the worst horses, I should say," gruffly answered the man addressed, gazing with ill-concealed contempt on the fleeing Russian cavalry.

WHY CHILDREN NEED MILK

The most important part of milk as a food for children is that which furnishes the vitality of the child. It is found in two substances, not very well known, which diet specialists call "growth-getters" because they beget growth. These two substances are found in milk more plentifully than in any other food. One of them is in solution in the liquid portion of the milk and the other is in the fat.

When the cream is taken from the milk half of the growth-getters are taken with it; and butter made from the cream contains practically all of those that the cream contained. Skimmed milk has the other half of these mysterious substances, and cheese made from this skimmed milk retains only a portion of them. Skimmed milk is better than no milk for a child, but not nearly so much growth will be made as when whole milk is fed. Yet milk, cream, butter and cheese all contain this growth-getter.

Milk is a Food

Milk is a food and not a beverage, and children who are drinking tea and coffee in lieu of milk are being deprived of their most important food, with the possible consequences of less than normal growth, with bones that are weakened or crooked. Not only does the milk furnish the vitalizing substances that promote the function of growth but it supplies the materials from which the growing body is formed. Such is the case with the formation of bone, made up largely of lime. No other food contains so much lime all ready for use by the body and at so low a cost as is furnished by milk. The muscles growing to keep pace with the lengthening bones need the protein furnished by the curd of milk, and the muscles make more rapid growth when fed on the protein from milk than on that from other foods.

Eggs, cod liver oil and—to a lesser extent—meat all contain the growth-getter which is found in the fat of milk. The whole cereal grains contain the one found in the watery part of milk. Thus it can be partly supplied in whole grain flours, meals and breakfast foods. This vitalizer is found also in dried beans, peas, lentils, meat and eggs.

But to give the child milk is by far the surest and simplest way of seeing that it has the necessary growth-getter.

There is likelihood of a present-day tragedy in this country—the children are given less milk. If the lives and the health of the children are to be insured each child must have milk and have it—by lance.

Do Not Tax Children

Only thoughtlessness or selfishness can make the children pay the first and the worst war tax through the taking away of milk or lessening the usual quantity of this most necessary food. The ill effects of this deprivation would not come swiftly enough to warn of the harm that is done but with a dreary slowness that is not likely to be noticed. Little by little the child's health is undermined but even when the break comes, whether it seems to be due to a contagious disease or to a severe cold, the real cause may never be thought of—the child has not had enough food of the kind that a child needs.

Without milk children cannot thrive, and even though they may be getting quantities of other food substances those who have studied the problems of child nutrition point out that slow starvation results, or at best such poor development that the child is stunted.

Parents are said to be changing well formed food habits in order that the little ones may have milk that they need. It has been long recognized that food prejudices are among the most difficult to overcome, but it is urged that the grownups of the household must be self-forgetful enough to adapt themselves to changes in their fare if by so doing the children may have their milk.

In many families to-day in which both milk and meat have been abundantly used the problem arises as to which one must be reduced. From the point of view of the pocketbook and from that of patriotism—the greatest good to the future of the country—let milk be retained, or even increased in the family diet. Without question milk is a cheaper all round food than meat, and, although the children must have milk, adults can use milk as a supplement to a decreased meat diet.

ROYAL JEWELS.

European Monarchs Disposing of Valuables in Hard Times.

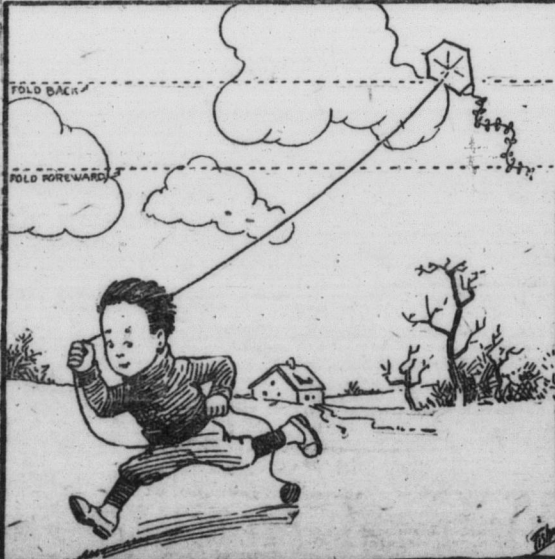
In times of stress the English workers deposit what Mr. Wemmick called their "portable property" at the pawnshop, and the French at the state establishment more euphonically called the mont-de-piété.

Royalty cannot descend to these shifts, although some of the crowned heads of Europe, through pressure of hard times since the beginning of the war, have had to dispose of their jewels.

The Czarina of Russia took time by the forelock by selling hers before the war began. Now the King of Bavaria has sold in Holland pearls to the value of half a million sterling. Doubtless these are the famous black pearls of his family, which, according to tradition, bring misfortune to their owners.

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