

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., 75 Adelaide St. W., Toronto.

Save the Soil.

Never before in the history of Canadian agriculture has there been any such a tendency toward the depletion of soil fertility. Thousands of farmers in our richest agricultural regions who were at one time growers of good cattle, sheep and hogs are becoming soil robbers. The high price of grain is tempting them to sell instead of feed out the crops. One may build up his bank account by that process for a few years, only to find that he has really been selling his farm by the wagon-load. Every consideration present and prospective, points to the importance of maintaining and increasing the fertility of the land, and this is just the reason why every farmer in Canada whose land will support live stock ought to find some way of utilizing good animals in his system of farming. The farms on which some sort of live stock may not profitably be maintained are few and far between.

The high price of grain has not continued long enough to enable anyone to measure its full effects, nor have we any means of determining whether the conditions which are holding the price of grains to their present level will continue long enough for the full effects to be realized. One effect, however, is plain, that it is checking the movement toward crop rotation, stock feeding and maintaining the fertility of the soil. Should this continue for years to come, we fear that this terrific waste of fertility that is going on will not only continue but actually increase.

It is going to take a number of years to measure the effect of this drifting away from live stock on the land. It has been with the utmost difficulty, even when grain was bringing moderate prices, that farmers could be persuaded to change from growing grain for the market to stock farming. Nor is this to be wondered at; for the growing of cattle, sheep and hogs is an entirely different type of farming. It is an easy matter to develop a profitable system of grain farming on productive land, but it requires exceedingly good judgment to make live stock yield maximum re-

turns. And when a man has once drifted away from live stock it is all the more difficult for him to take up the work where he left off. Another question arises: What is going to be the result of the present generation of farmers drifting away from live stock farming on the future generations of farmers? The difficulty of teaching the coming generation how to care for live stock is sure to hold back the development of the industry for many years. Therefore, grain must be grown until the farmer is affected by reduced fertility and consequent declining yields. Then when the tide does turn, as it eventually must turn, there is going to be a mighty problem of restoring the wasted fertility and a mighty hunger for knowledge of live stock feeding and soil management.

One thing is certain, that unless there is a complete change in our methods of farming, grain will never be as cheap as it has been in former years. There are too many demands for it besides feeding it to live stock. In fact, there are only two ways of increasing grain production; one by increasing soil fertility; the other by better methods of culture. Both of which are educational processes and necessarily slow.

Live stock raising is the best insurance against an impoverished agriculture. Those who have studied the problem know that this is true. Do not increase your acreage of grain crops, but improve your methods. Grow fewer acres and more bushels to the acre. Do not keep too much live stock but use better blood and give them better care. Do not break up good pastures and put them in grain because they offer a profitable rotation of crops and become a soil robber and a price chaser. The scales are sure to turn in favor of the live stock grower, and as live stock cannot be increased rapidly there is sure to be some good years ahead. It is claimed that hogs are an exception to this rule, that they can be increased very rapidly, but, even with hogs, when the supply of breeding stock becomes reduced it requires two or three years for production to get back on a normal footing.

Sheep Notes

"I would like to know how to do good farming without sheep," says Mrs. George McKerrow, of Wisconsin, one of the best and most widely known sheep breeders of America. "Why?" he continued. "Because my sheep use up the wastes of the farm. They clean up the grass, weeds, brush and gleanings, and in so doing turn into cash what otherwise would be lost."

"Sheep," he says, "make the most economical gains of any kind of live stock because they clean up the odds and ends. They are particularly useful on the farm in the fall of the year, for they turn into mutton the things that otherwise would not be used. At the same time they save the feed stuffs that would be given them if they did not have access to these other things."

After harvest, Mr. McKerrow's sheep are turned into the oat fields for a few hours the first day; an hour or two longer the second day; and the time gradually increased until at the end of a week they have complete possession of the fields. The lambs are permitted to enter the corn before it is cut and they clean up on the weeds and lower corn plant leaves. Lambs do not pull down the lower ears of corn as do the sheep. Roots are grown for the cattle and sheep on Mr. McKerrow's place, and after the larger roots are hauled into storage for winter use, the sheep are turned into the field and eat the smaller ones that remain. Both the sheep and lambs are turned into the aftermath

of the meadows and this brings them into winter quarters in good condition.

Another profitable practice on this farm is that of plowing up fields that become weedy after harvest. These fields are sown to rape and turnips, and later the sheep are turned in. They eat the rape and turnip tops with relish and will later hallow the meat from the turnip, leaving but a shell.

Mr. McKerrow has found that a frequent change of pasture is beneficial to the sheep. A thirty-six-inch woven wire fence in twenty-row lengths is moved about, thus preventing the too short cropping of the grass, and furthermore reducing the internal parasite plague to a minimum. Water is also an important consideration, and ewes particularly should have water the same as dairy cows.

"I would not go so far as to say that there should be some sheep on every farm," declares Mr. McKerrow, "for peculiar conditions might not make it practical, but I do believe that there should be sheep on the vast majority of farms in this country. They turn waste into cash. The sort of saving that the good housewife is making in her kitchen can be practiced with corresponding effectiveness by the use of sheep on the farm."

Poultry

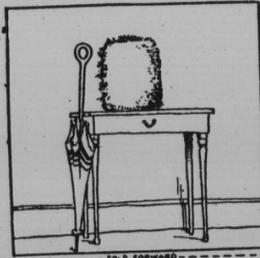
Grass clippings are an excellent green feed for chickens. The backyard poultry flock of a family often lacks sufficient green feed with a consequent reduction of egg and meat production. With the easy availability of lawn clippings the poultryman can always have green feed through the summer for his chickens. The flock can be fed daily as much of the green clippings as they will eat. If any continued bowel trouble shows, the amount should be reduced. The remainder of the clippings can be allowed to dry and fed moistened during the time between lawn cuttings. Amounts in excess can be dried for winter use. Dried grass clippings are a good green food for winter. They can be dried and stored in sacks. These dried clippings, moistened and fed to the flock, are a very fair substitute for the succulent green feeds of summer.

Pay More and Eat Less.

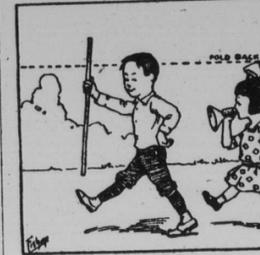
"One could eat two meals in succession very easily in London, and leave the table slightly minus the self-satisfied feeling to be got by unrestricted eating in any American Cafe," writes Raymond B. Bolton, a newspaper correspondent. "In addition one has to pay more on the average for a meal here than in the United States or Canada."

FUNNY FOLD-UPS

CUT OUT AND FOLD ON DOTTED LINES



I'LL GO AND BORROW MOTHER'S MUFF. I THINK THE FUR IS JUST THE STUFF TO MAKE A TALL DRUM MAJOR'S HAT. WE HAVE NO DRUM—BUT WHAT OF THAT.



To Blast Big Stumps.

About the first work I did with dynamite was to tackle a big field of stumps. For this I used a 40 per cent. grade, which is about the proper thing to use for stump-blasting on ordinary soils. I find that on low, boggy ground, where the stumps are very large and tough, it is more economical to use a higher grade of dynamite, such as 50 or 60 per cent., placing it under the stump and firing electrically by a blasting machine. All very large tough stumps over three feet in diameter, such as oaks, hickory, and elm, should be blasted only by this method.

The distributed charges will then all go off together, and the combined effect of the several charges so distributed will give a much better blast than putting the entire charge in one hole bored directly under the stump.

A few months ago a neighbor of mine excavated a ditch through a low bottom field of his which was very much subjected to overflow. In the digging of this ditch he encountered several large willow stumps which were at least one hundred years old but still in a pretty sound state of preservation. Knowing that I was accustomed to using dynamite, he called upon me to blast out these stumps standing in water, for it was too wet and boggy to get them otherwise.

I find that blasting for tree-planting, either for fruit or shade trees, is one of the most profitable ways of using dynamite.—R. W.

Getting Even

"Yes," remarked a conceited young bachelor, "I have the greatest admiration for the fair sex, but I never expect to marry—oh, dear no!" "Indeed!" remarked a lady. "Then I am to understand that you not only admire women, but you have a sincere regard for them as well."

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 diagnosis. Address Dr. Andrew F. Currier, care of Wilson Publishing Co., 73 Adelaide St. West, Toronto.

Remedies for Nervous Diseases.

In no class of diseases are medicines more hopeless and useless, so far as cure is concerned, than in those which involve the brain and spinal cord and the nerves proceeding from them.

I don't mean that medicines are powerless to relieve some of their symptoms, but I do not know of any that will cure them, when once well established, any more than they can cure cancer.

Neither do I include in this sweeping statement the milder forms of neuralgia which are often relieved and cured for the time at any rate, by external or internal remedies.

In a great many cases it is a waste of good money to buy medicines, and to expect them to cure disease will almost surely be disappointing.

Three medicines and perhaps four the world could not well do without, opium to relieve pain, quinine to cure malarial poisoning, mercury to cure syphilis, and salicylic acid to cure rheumatism.

We could manage to get along if most of the others were dumped into the sea.

More than thirty thousand different proprietary medicines are made in North America; who would be foolish enough to imagine that they would do what they are advertised to do for those who buy and take them.

If the money spent for them were used in buying good simple food, how much better everybody would be, except, of course, the patent medicine makers.

Some nervous diseases are self-limited, they burn like a candle until

The Dairy

One of the most important things in the operation of a dairy is the cleaning of the dairy utensils. They must be cleaned and rinsed thoroughly immediately after being used; this will prevent the water in the milk from evaporating and the solid matter sticking fast to the utensils. If it is found impossible to wash the utensils at once, it will be a good plan to rinse them in lukewarm water so that the greater part of the milk will be removed before it has had a chance to stick fast to the pail or cow. Hot water should never be used until the milky substances have been removed with the lukewarm water first, as the hot water will coagulate the casein in the milk so that it sticks to the pail and will therefore require a great amount of washing before it can all be removed from the vessel.

After thoroughly rinsing the utensils in the lukewarm water, they should be thoroughly washed in hot water, using some good brand of alkali washing powder. There are many good washing powders to be found on the market that will answer the purpose and make this part of the dairy work easier each day. Soaps or powders that contain grease as a part of their composition will not make a satisfactory brand of soap or powder to use in this work and not nearly as good as a genuine alkali powder.

It is a good plan also to have on hand several good stiff brushes that are adaptable to cleaning the various utensils used daily. If steam is installed it can be used very effectively in sterilizing the utensils, but of course this is not always installed and it is necessary therefore, to follow out the rinsing and washing process, as I have described. Never wipe the utensils after washing them in the hot water. The heat imparted by the steam or hot water will make the utensils dry very quickly. They should be placed upside down on the racks so no dust or dirt will get on the inside of them. This is just as important as the cleaning process. Never put covers or lids on the cans or pails, but give them free access to air and sunlight at all times. This keeps them bright, clean and sanitary.

Camera Used to Candle Eggs.

Bad eggs are unfailingly detected by the camera. This has been demonstrated in France, where experiments are being conducted with a photographic egg-testing apparatus, says Popular Mechanics Magazine. The idea of utilizing the camera instead of the human eye for candling is a new one. So far it has not been carried past the laboratory stage, but its commercial utilization at present, it is of more than passing interest. Eggs are held in a half dozen oval holes provided in a metal plate. Their large ends point toward a common centre. While intense light is passed through them, they are photographed. A powerful lens is used and an exposure ranging upward to three minutes is made. The result is a picture that shows the size of the air chambers in the eggs.

A Patriotic Urge

Colonel Grimbattle—Why so gay? You were in deep mourning the last time I saw you.
The Widow Lookabout—I was. But since the soldiers began to rendezvous here I've been called to the colors.

FALL SETTING OF STRAWBERRIES

Heretofore our preference has been spring setting of strawberry plants over fall set. I could never see what was to be gained by fall setting as ordinarily practiced. Late August and early September is the season usually employed for this. To be sure, when weather and soil conditions are favorable, and good plants set, quite a fair growth will be made both in root and crown, growth sufficient to mature a fair crop of berries if allowed to fruit. But if permitted to fruit the first season an inferior stand of young plants must necessarily result. The cultural conditions required, in each instance are altogether incompatible. The object or purpose sought in each case is wholly unlike.

Then, too, I figured that spring set plants make all the growth necessary under proper conditions of soil and culture, hence, what was the use of endeavoring to establish the new plantation at a season when favorable weather conditions were so much more problematical. Another thing, the labor of creating a fine mellow root pasturage with plants occupying the ground, would be greatly augmented. Indeed, I figured that to place a piece of ground in as excellent a condition as is possible when larger, deeper working tools may be used, is practically out of the question; hence, the experience I then had, I decided that the fall setting of strawberry plants had nothing to offer us.

But for some time back I have been looking at the proposition in the light of greater experience and can now see how, if fall setting can be made successful, the plan offers one very decided advantage to us, viz., the setting of the plants will come at a season when other work is far less pressing. With a large amount of work of this sort to be done in the spring some of it must necessarily be neglected; hence, any plan or system that promises to relieve the pressure of work at this time is worth a fair trial. As time passed the attractiveness of the plan increased until I decided to try the plan out. So this fall an acre of new bed has been set as an experiment. Conditions of soil and weather were not ideal. If the plan is a success this time, it will be possible to make late fall setting successful, under average fall weather conditions, so it seems to me.

To begin with, the ground used was in peas this summer. As the rainfall has been deficient since pea harvest the ground was not moisture-saturated as may be secured under ordinary spring conditions. For several weeks after pea harvest the soil remained almost dust dry. Then a shower came to moisten the soil down

about two inches, when the ground was plowed and floated down with a plow drag. Other showers followed in a week or so of sufficient magnitude to moisten the surface so that a fairly good soil plant bed was secured. A shower came just as the work of setting was begun; just enough to crust the surface when the weeder was used to re-establish the loose surface. This loose surface soon dried out so that it bothered some in setting, for additional work was made necessary that none of this dry soil got next to the roots. Then, too, the job was more or less unpleasant as a fresh breeze blew the dry particles into our faces.

Just how the experiment will turn out, future developments only can reveal. Only light showers have fallen since the setting was finished. To prevent crusting and consequent loss of soil moisture, the weeder has been used to re-create a loose surface. Because of the deficient rainfall it may be necessary to reset quite a number of plants. This will be done as soon as it becomes clear that the plants first set are not starting out vigorously.

Of course, it is not expected that plants set this late in the season will make much growth in the short time before freezing weather sets in. This is not expected. Neither is it necessary to the success of the plan. All that is required is that the plants get their root system established and be ready to do business next spring.

It will be imperatively necessary to supply winter protection to these fall set plants. They wouldn't be worth shucks if not fully protected from the injurious results of exposure to winter's frost and sunshine, and the heavy action upon the soil of "Sugar Weather." One of my helpers said, when I cautioned him against getting the plants too deep: "But just wait till the frost gets in its work." Our reply was to the effect that it would never do to let frost get in its work. The plants must be fully protected against such harmful agencies.

Whatever may be the outcome it is certain that one feature of advantage will be a success; we will have a start of a week with our spring work. Establishing the new strawberry bed in spring, coming as it does right along with so much other similar work, adds largely to the strenuous life of the season. If this job can be transferred from this busy time to a season more convenient, a very decided advantage will be gained.

After all due care and protection, spring growth may show up plants not starting out with full vigor. These may easily be replaced with plants from the propagating bed and a full stand made secure.—M. N. Edgerton.

Popularity.

It is possible for a person to be undeservedly popular. His popularity may not be due to good qualities, but to wealth or other advantages. Many people honor a person for selfish reasons. They think it pays them to have his good will.

A humble person may after all have as many real friends as an honored one. The friends of the former are generally true, being friendly because of admiration for him and not because they are seeking worldly favor. He knows who his true friends are, but the other doesn't. When an apparently popular man falls in a financial or any other way which reduces him to a humble position he soon finds who his true friends are.

Unless he is a very bad character, one with only a few friends is generally a man of better principle than is one with only a few enemies. The former usually doesn't seek popularity, but the latter generally does. It is easy for anybody to become popular if he has the advantages. When a person has only a few enemies they generally have good reasons for being such. It is found that many a popular man will be very generous in his dealings with people he wants for friends but unmerciful when dealing with those whose friendship he doesn't desire. One person may truthfully say of another that he may have acted good with nearly everybody else but that he acted meanly with him.

Individual Churns.

The cream-gathering truck stopped the weekly or daily churning for us, and the idea of table butter became a question. The creamery had that fixed before they asked us for our cream.

The nice-looking, high-class creamery butter wrapped in tissue paper and packed in ice, right to our door every time they came for our cream, was their answer.

We tried it. Fresh and clean as it was, it did not fill the want for good country butter.

It is out of the question to make a churning each week with the big churn, and gallon and a half glass churn which we bought at our hardware store for a small amount two years ago, long enough ago to know that our investment is a success and that it is the real way for the farmer to have butter upon his table.

This sterilized glass churn is capable of making clean butter, and it is operated easily.—G. W. B.

Corks if steeped in paraffin oil for a few hours will make excellent fire-lighters.

"Country of Mine."

Country of mine, that gave me birth,
Land of the maple and the pine,
What richer gift has this round earth
Than those fair, fruitful fields of mine?

Like sheets of gold thy harvests run,
Glowing beneath the August sun;
Thy white peaks soar,
Thy cataracts roar,
Thy forests stretch from shore to shore;

Untamed, thy northern prairies lie
Under an open, boundless sky;
Yet one thing more our hearts implore—
That greatness may not pass thee by!
—Helena Coleman.

The Farmer's Office.

Farmers are not slow in recognizing the value of an article or method for the improvement of their business, so they are buying typewriters and other office conveniences, and they're using 'em, too.

The typewriter is especially useful, as it writes letters in a standard way that indelibly stamps the sender as a business man. For the sake of the letter alone the typewriter is well worth owning; but it has other uses which help prove its value. Carbon copies of all letters written can easily and conveniently be made by inserting a sheet of carbon paper and a "second sheet" under each letter written. Carbon copies are accepted as evidence in the courts. Card index records can be printed by the typewriter; also bills, loose-leaf records, etc.

The first cost may be a bugbear to many. This is a needless fear, as a good rebuilt typewriter can be purchased for about \$25 or \$30.

The repair expense is usually very slight if the typewriter is oiled occasionally and used with reasonable care. It will be necessary to purchase a new ribbon once or twice a year, depending on the amount of writing done; but this is a very small item of expense.

To Conserve Fish Waste.

The Canada Food Board has been advised by Messrs. Ernest Scott & Company, engineers, Fall River, Mass., that they are prepared to install equipment in Canada for the reduction of fish and fish waste to fish meal, fertilizer, oil and glycerine. Considerable research has been conducted along this line by private parties and various branches of the Government in Canada, but great quantities of the material are still being wasted.

"An easy job will suit me." "How about winding the clocks every week?" "I might make that do. But what's the matter with tearing the leaves off the calendars every month?"

SMOKE TACKETTS
ORINOCO
CUT COARSE FOR PIPE USE

WOOL

Farmers who ship their wool direct to us get better prices than farmers who sell to the general store.

ASK ANY FARMER! who has sold his wool both ways, and note what he says—or, better still, write us for our prices; they will show you how much you lose by selling to the General Store.

We pay the highest prices of any firm in the country and are the largest wool dealers in Canada. Payment is remitted the same day wool is received. Ship us your wool to-day—you will be more than pleased if you do, and are assured of a square deal from us.

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