Farm Crop

CONDUCTED BY PROF. HENRY G. BELL The object of this department is to place at the serce of our farm readers the advice of an acknowledged atherity on all subjects pertaining to soils and crops.

Address all questions to Professor Henry G. Bell, in one of the Wilson Publishing Company, Limited, Torong, and answers will appear in this column in the order which they are received. When writing kindly menon this paper. As space is limited it is advisable where unediate reply is necessary that a stamped and advessed envelope be enclosed with the question, when he answer will be mailed direct.

Copyright by Wilson Publishing Co., Limited

J. D.: Would you tell me what I seed and work the fertilizer into could do with apple trees that were gnawed by mice last winter? The trees are about seven years old. They have been gnawed all around to a height of from six to twelve inches. I have about two hundred trees.

Answer: For trees that have been injured by mice, clean and cover the wound with grafting-wax. If the girdle is a small one, the bark may naturally heal when the sap rises. You may save the trees by inserting scions or cuttings like you use for grafting, inserting the cuttings above and below the girdle, having this bridge the gnawed part. Bandage both ends of the scion the same as you would in grafting. This work should

e done immediately.

J. B.: Would fertilizer be of much value when drilled with oats to get a good catch o falfalfa on common good catch of alfalfa on common fertilizer would you recommend?

Answer: Fertilizers drilled with oats with which you are seeding alfalfa on a common loamy soil would be of great benefit in feeding both the oats and the tiny alfalfa plants. I would recommend 250 lbs. per acre of 2-8-2 fertilizer drilled or worked into the soil at the time the oats and alfalfa are seeded.

W. W.: I want to sow one hundred and fifty pounds of acid phosphate and one hundred and fifty pounds of lime to the acre. Can I mix them together and sow them with a lime sower, or will the acid neutralize the I am to sow them on wheat when I seed to grass in the spring.

Answer: Never mix lime and acid phosphate. The lime acts on the acid phosphate turning the phosphoric acid back to the insoluble form. Apply the lime about two weeks ahead of the acid phosphate and there will be no injurious effect.

H. C.: I have some Lombard plum trees twelve years old which bloom heavily every spring, then the little plums drop off; some are half-grown I have not sprayed very much. must I do to get a crop of plums? The

trees are large and nice. Answer: Your plum trees may be suffering from lack of plantfood. Apply from 10 to 12 lbs. per tree of fertilizer carrying 3 to 6 per cent. ammonia, 8 to 9 per cent. phosphoric acid, and 1 to 8 per cent. potash. Scatter this around the trees out about the area covered by their branches, so that it may be worked into the soil when the orchard is cultivated.

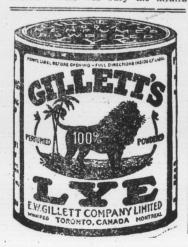
You must spray your trees if you expect to control diseases which effect the plums.

Subscriber: Please tell me how to handle white sweet clover for the best success. Will it grow on sour soil?

Answer: In order to get a stand of sweet clover, work the soil early in spring, producing a medium mellow Apply About two weeks later when you are drilling your oats and barley with which sweet clover is sown, apply about 250 lbs, per acre of 2-8-2 fertil-This will feed the oats and the young sweet clover. Sweet clover does not thrive on sour soil, hence the application of lime.

R. P.: Would you consider it wise to sow alfalfa seed on my wheat ground this spring? This is clay loam and well drained, also soil is in good con-

Answer: Many men have gotten a ood stand of alfalfa by sowing it on for the horses? Would it be safe for If this is done you should at the same time top-dress your winter wheat with about 200 pounds per acre of a fer-tilizer carrying 4 to 5 per cent, ammonia, and 10 to 12 per cent. phosphoric acid. If you have a light harrow or one that you can adjust, turn the teeth back and harrow after the seed and fertilizer has been sown, harrowing with the rows but not This will bury the alfalfa



damp soil.

Reader: I have ten acres of very poor sandy soil that should be seeded this spring, and also wish to sow it to oats. The soil at present needs fertilizing badly, and can you advise the proper kind of fertilizer, amount to be used, and if it is more expensive of than other kinds? Also quantity of oats to sow per acre to produce best results with seeding? Also particulars on seeding? Should big clover be used, or what kind is best to insure a catch?

Answer: For poor sandy soil on which you wish to grow oats, I would advise 250 lbs. per acre of a fertilizer carrying at least 3 per cent. ammonio 8 per cent. phosphoric acid, and 3 per cent. potash. On this soil I w not sow more than a bushel and a half oats to the acre. You can seed down with about 10 to 15 lbs. of commo red clover to the acre.

W. F.: What kind of fertilize would you advise me to use on sandy soil that I am trying to put in shape for cucumber pickles? Have put a coat of manure on it which I will plow under the spring. What fertilize should I use on muck, which I expect to seed along with oats in the spring?

Answer: To prepare a sandy soil for pickles, I would advise you to work in about 400 lbs. per acre of a fertilizer carrying 4 to 5 per cent. ammonia, 8 to 10 per cent. phosphoric acid, and 4 to 5 per cent, potash. For oats on muck soil apply about 250 lbs. per acre of fertilizer analyzing 10 per cent. phosphoric acid and 8 per cent. potash.

W. P.: Kindly tell me what is the proper temperature for cow stables where milch cows are kept.

About forty degrees is considere the best temperature to keep a stable taking everything into consideration. If you have it much warmer than this for any considerable length of time the cows do not seem to be so vigorous and haven't as good an appetite However, they won't eat quite so much if you keep the temperature up to seventy degrees, neither will they ap parently act as well and have as much rigor. Quite careful experiments have been made on this question of temp crature and they all tend to show that in feeding for a considerable length of time, around forty degrees is the

more practical temperature.

E. D.: What value has bean pods for feed for dairy cows? Are they all right to feed to a cow heavy with calf, say once a day? Is there gas enough to bean pods to hurt a cow after calving?

Bean pods are a very good feed for any kind of stock. Of course, some bean pods are more valuable than others, just as some hay is more valumellow at le. If the beans are harvested be-lbs. of fore they get too ripe and when the ground lime per acre and harrow it weather is favorable so they are not in thoroughly with the last harrowing bleached out in the rain good bean pods are nearly as good as clover hay. There is nothing in the idea that bean pods would injure a cow heavy in calf. I don't think you can give her any better food. You can feed bean pods to any kind of live stock with the assurance that no harm will come.

-6-

good stand of alfalfa by sowing it on the spring. In the spring of their fall wheat in the spring. In the spring of their fall wheat in the spring. difficult to secure good seed in the fall.

Where rye and vetch hay is cut at the proper time and properly cured age quite as much as does a cow or tomato which in every form is an there is no objection to feeding it to horses or any other kind of live stock. Probably the horses will like the vetch better than they do the rye. Sometite than they do the rye than the rye t better than they do the rye. Sometimes when the rye is not cut at the celled for regulating purposes, For

Overgrazing will ruin the best of

A "step stool" in the kitchen saves carrying many a chair.

Protein grown on the farm in the form of clover, alfalfa, and various legume crops is generally cheaper than that bought on market.

A well-kept wood lot or a plantation of forest trees on the hilly portions of the farm will make the place more attractive.



Vegetables Are Important

"Vegetables other than potatoes very form we most need. Iron tonic have never cost me over fifty cents out of a bottle will not do what iron a year, but I am canning every kind out of a dish of vegetables will do!

men, said that many of his patients men, said that men, said th added to give looks to the meal rather because it is considered neces "I find that very few of these sary use more than two or three They have never cultivated the habit for when children they disliked vegetables and now as adult

A little attention to the subject shows that Canadians have a greater variety of meats, fish and poultry than have other nations and more of these in bulk as well. Although it also true that many common vegetables, such as the potato and tomato originated or were brought to the highest perfection on this continent very many of us do not eat vegetable every single day at least once and preferably twice. If every housewife who reads this article will resolve to do this and will keep her resolution, she will be surprised at the improved health, the added zest in life, the increased ability of every single mem-ber of the family to meet daily tasks and obligations.

they do not think of them."

By "vegetables" I mean any of a variety of a score or more, other than

Effects of Wrong Diet.

The dentist asks, "What does this child eat?" when he discovers poor teeth. The doctor asks, "What does this child eat?" when he discovers flabby muscles and emacation. Then they recommend an abundant use of vegetables-other than potato. True, they may and probably will recommend other things, but doctors know that a strong body cannot be built or kept in repair without the daily use of those foods which have sprung up from our mother, the earth.

Older people who suffer from high blood pressure, from aching food tastes! We should have more aged people in our homes, well old people who are capable of enjoyment and who are not conscious every moment of an ache or a pain or a creak- cans are baby beets, young carrots,

tables that they should be so serious-They contain fibrous or rough magested and in consequence acts as a ballast for the ever active digestive pumpkin, which are as excellent in celled for regulating purposes, For the lime we need we must turn to the stock will leave it and pick out the vetch.

It will be perfectly proper to save the vetch seed and keep it till next the v the vetch seed and keep it till host fall to sow with the rye. It will not deteriorate in germinating power to any degree in that length of time.

Variety of vegetable 100d. Our bones are composed largely of lime, so are our teeth. The heart beats regularly because there is lime and soda in the as much as possible and place the setters in protected nests. blood. Clotting of the blood prevents fatal results from cuts and other accidents and clotting takes place normally because there is lime in the blood. Lime as found in the tissues of vegetables is easily taken up by the body and utilized in building teeth, bones and muscle. That physicians and dietetians prescribe vegetables for daily diet is not to be wondered at

Minerals and Vitamines.

Lime is not the only mineral substance we find in vegetables. Iron, that tonic so often recommended in the spring, is found in them in the

I can get for I've been using vege-tables since last spring when my chil-dren joined a class for the malnour-ished. We have not had to spend one cent for laxatives and we are all feel-ing better."

This was what a mother said to its down needs and the child get. This was what a mother said to its due portion of iron during the me who had waked up to the fact adolescent period, for then the body that her children were eating plenty passes through so many changes, that of food but that food was not being if food habits are not correct, anaemia used by the body for building up a follows. An anaemic child cannot de-physical organism which could resist velop normally, in mind or body, and iscase. A very noted physician, speaking vegetables and those which have a recently in a convention of medical green color, abundantly, for they are men, said that many of his patients richest in iron.

consideration. The early spring months are especially trying for the store cellar contains the remains only of cabbages, onions, a few parsnips and carrots. The roots may have grown tough and pithy, and have lost their delicate flavor. Cabbages and onions cannot appear on the table every day if happiness is to be met at the table! Celery can usually be found in even the smallest grocery stores, and is a most dependable vegetable, because its flavor is sufficiently bland to make it well liked. It can be prepared in a variety of ways-singly or in combination, cooked or uncooked that it is an inspiration to the most discouraged planner of meals. Each locality has usually one or more vegetables that may be obtained fresh the year round and these, while expensive,

can be relied upon for emergencies Canned Vegetables in Spring.

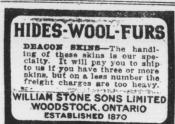
More and more, we are glad to joints, we have with us the canned vegeexcessive fatigue, and kindred ills, are tables, both home and commercial recommended to reduce the use of product. Look over the list now, check meat, eggs and such hearty foods, to a small portion two or three times a lack. They come much cheaper by week, and to increase their use of the case as everyone knows and the vegetables, which too often they plead cases may be had in assortment. Bethey dislike, although they acknowledge that life is more precious than all winter and will have them fresh

ing joint.

What are the virtues found in vege-tatoes. Onions are always for sale. salsify or vegetable oyster, sweet po-

We can also buy canned chard, ly considered in our food program? spinach, asparagus, green string and tringless beans, wax beans, lima terial which cannot be completely di- beans, full grown and baby variety.

There is, of the gourds, squash and



ISSUE No. 13-'21.

The Sunday School Lesson

APRIL 3RD The Ideal Christian, Romans 12: 1, 2, 9-21 Golden Text St. Luke 6: 31.

St. Luke 6: 31.

Aposile's "therefore" refers to the whole argument and teaching of the preceding chapters. He has been acting forth the mercies of God, how God, in His compassion for helpless sinners, who could not save themselves from the guilt and power of their sin, has provided salvation in Him and love Him. Therefore, Paul urges an unreserved consecration, a giving of the body, which seems here to mean the entire life, in whole-hearted submission and service to Him who has done this great thing. The exhortation is: He has saved us; we are His; let us give ourselves to Him. A living sacrifice. That which is offered in sacrifice is given to God. It becomes His, and is not to be divided to raken back. The sacrificed victim of ancient worship was slasin at the altar. Paul exhorts to the giving of a life, in all its activities and powers, to be lived in obedience to the will of God—a life not to be destroyed, but to attain fulness and perfection in a such obedience. Given to God it becomes holy, and so must become fit in a such obedience. Given to God it becomes holy, and so must become fit in a such obedience. Given to God it becomes holy, and so must become fit in the certain fulness and perfection in such obedience. Given to God it becomes holy, and so must become fit in the correct of the such of the same their sorrow, and preserve a reformal or mechanical obedience, but a rational and intelligent service. Find lay says (Peake's Commentary) it implies intelligent practical devotion, the religion which makes work work was a specific or the Christian than that which the fashion or fancy of the age dictates. That higher standard of conduct for the Christian than that which the fashion or fancy of the age dictates. That higher standard of conduct for the Christian than that which the fashion or fancy of the age dictates. That higher standard of conduct for the Christian thould do his best. If a province of the such that they have the first of the such that they have for the such than the first of the such than

meet our need for this essential mineral, but we can get it from vegetables and the greater the variety to which we accustom ourselves, the better.

Another reason for including vegetables in our dietary is that they contain very important regulating and stimulating substances called vitamines. We read about vitamines till we are almost tired of the name but they are most vital to our life. While we know little of the composition and make up of vitamines, we do know that growth, health and poise are dependent upon them. We know that they are not manufactured within our own bodies, but may be stored there if taken in in sufficient quantity in the foods which we eat.

Vegetables, fresh, stored and canned, must all be considered when meals are planned and as there are three hundred and sixty-five days in the year, they must all be taken into consideration. The early spring months are especially trying for the

which is God's highest law, and which is to become the supreme motive if all our activity, must be sincere and unaffected, a genuine motion of the heart. We, who lack this love, must seek it in Christ, through the gift and farm crops.

Paul evidently thinks that it may be impossible to preserve peace, but that the Christian should do his best. If war is forced upon him he may have to fight—as men have fought against the tyrant, the thief, the murderer, and the invader of the sanctity of home or country, or in defence of the

weak.

But there must be no place for revenge. That rests in the hands of God, whose justice is unfailing, yet tempered and controlled by love. Paul quotes a famous passage from the book of Proverbs (25: 21, 22), in which the finest recently is declared.

vice.
Finally the injunction to the Christian is simply:
"Do not let evil get the better of you; get the better of evil by doing good." (Moffatt).

The heart of the forest problem is to get the idle, or partly idle, land to work. If all the land suitable for forest production, were growing reasonably good crops of trees there would be no forest problem. Land suitable for grain and root crops is not required for forests. And the more forests we have on rocky, broken, sandy land, the larger crops we will grow on the land that is suit for



PAYING INVESTM CUT DOWN WASTEFUL EXPENDITURE

Three Ontario Potato tests gave an average gain of 50 bushels per acre, and corn tests an increase of 28 bushels per acre. Indiana Station has just announced a gain of \$167.00 per acre for an expenditure of \$63.00 in tile, lime and fertilizers. Order your fertilizers Now-and make sure of the plantfood supply. Booklets free on request.

SOIL AND CROP IMPROVEMENT BUREAU Henry G. Bell, B.S.A., Director, 14 Manning Arcade, Toronto



Does it pay to use Fertilizer? Taking as a basis last year's increases in yields and the present prices

\$1 spent in Gunn's Shur-Gain Fertilizer for Oats returned \$2.37 "Corn " "Wheat " " Potatoes Order your Shur-Gain Fertilizer now, before the rush, and thus avoid disappointment.

Gunns "Shur-Gain" fertilizer is sold throughout Ontario by representatives who are farmers and are using "Shur-Gain" fertilizer themselves. Every farm is a factory Keep your factory running at maximum " Sugar Beets

for farm crops;

capacity.

If there is not a "Shur-Gain" representative near
you, write us regarding an agency.

