

Farm Crop Queries

Conducted by Professor Henry G. Bell.

The object of this department is to place at the service of our farm readers the advice of an acknowledged authority on all subjects pertaining to soils and crops.

Address all questions to Professor Henry G. Bell, in care of The Wilson Publishing Company, Limited, Toronto, and answers will appear in this column in the order in which they are received. As space is limited it is advisable where immediate reply is necessary that a stamped and addressed envelope be enclosed with the question, when the answer will be mailed direct.



Henry G. Bell.

Question—W. W. M.:—Is there any quantity of spring wheat grown in Kent and Essex Counties? Would you advise planting spring wheat in Kent County on a good clay loam soil, tiled 3 rods apart, 4 in. tile? When should it be planted so that it will be sure to ripen?

Answer:—Spring wheat has been successfully grown in both Kent and Essex counties. In 1914 Kent County was growing 1,018 acres while in 1914 there were only 183. In 1911 Essex County was growing 1,345 acres and in 1914 there were reported only 177 acres. From a study of the climatic conditions, both the range of temperature and the rainfall, I see no reason why spring wheat cannot be successfully grown in these counties, if proper precautions are taken.

According to investigations at Ontario Agricultural College, spring wheat should be seeded as early as the ground can be worked. I note that your ground is clay loam and is well supplied with tile. This ground should not be worked while it is sticky, nor should it be left unworked until it plows up into a rough seed-bed. In order to insure a good stand of wheat, you would do well to apply 200 to 300 pounds of a fertilizer carrying from 2 to 3% ammonia and 8 to 10% available phosphoric acid. The ammonia will give the young crop a good, vigorous start, while the available phosphoric acid will hasten its ripening. At a recent meeting of the Ontario Experimental Union, Prof. Zavitz strongly recommended the use of Marquis wheat. If this is sown at the rate of one and a half bushels per acre on well prepared land, there is good reason to expect a profitable return.

Question—S. R. P.:—I had a bad dose of smut in my wheat last summer. What treatment will make it safe to use again next spring?

Answer:—The disease in your wheat last summer may have been either the loose smut or the stinking smut or Bunt. About the only cure for the loose smut is careful selection of seed from grain which is healthy, followed by soaking the seed five hours in cold water and then 10 minutes in water at 130 degrees Fahrenheit.

It is most likely that the disease in your crop was stinking smut or Bunt. This attacks the young wheat seedling and the seedling parts or spores are carried in sacks which take the place of the wheat kernels. Experimental tests show that the best method of killing Bunt or stinking smut is to immerse the seed 20 minutes

in a mixture of 21 gallons of water to one-half pound of formalin. There are other treatments, but this is one of the handiest and most effective, as formalin can easily be purchased at any drug store. Some farmers prefer to sprinkle the mixture of water and formalin on the wheat and to cover the wheat-pile with bags over night, so that the formalin acid gas, which is dissolved in the mixture of water and formalin, will be kept in around the wheat as long as possible. It is this gas which kills the tiny smut spores.

Question—K. G.:—We had 40 acres of alfalfa which we cut three times last summer. Am afraid it went into winter rather weak. I have a good supply of manure. Would you advise manuring this field? Would you advise liming it? If so, when?

Answer:—If alfalfa has gone into the winter in weak shape it should be given good care early in the spring, if its vigor is to be revived and a good crop is to be produced. If you have some fairly well rotted manure, I would advise spreading at least two to four tons of this to the acre on the alfalfa field. I would also advise applying from one to two tons per acre of finely ground limestone, evenly distributed over the field. When the snow is gone in the spring and the alfalfa has gotten a good start, it will greatly help it to top-dress the alfalfa with about 250 to 400 pounds per acre of acid phosphate or bone meal. The late Joe Wing, the great American alfalfa authority, said:

"The phosphorus generally stimulates the little alfalfa plants and makes them hustle to get ahead of the weeds and grass. On Woodland Farm we have used raw bone meal and acid phosphate with about equal results, as far as the eye could see. It is our practice to put on 250 to 400 pounds per acre of 16% acid phosphate when the alfalfa is sown on soils well filled with lime. Acid phosphate is about the most soluble of the phosphate fertilizers and thus is best for top-dressing when there is abundant lime in the soil."

On our farm we give the alfalfa meadows a heavy dressing of phosphorus (phosphoric acid, and this practice pays well.

If the alfalfa field is fairly heavy soil and it appears to be pretty closely compacted, it would greatly help the alfalfa to work the field by harrowing with the teeth of the harrow turned back so as not to tear the plants out. This also would stir up a soil mulch and help retain the water that is so necessary to big crops.

The Dairy

Sometimes a cow is uneasy, steps or moves or even kicks when being milked. See if there are stray hairs on the udder that are being pulled. Remove them by the use of shears and note if the cow is more quiet.

Don't neglect to have the box stalls ready for the cows that are to calve in the early spring.

"Lest we forget" let me again urge

that if the stables are not quite warm enough, blanket the new-born calf. Pieces of old wool blankets washed clean are just the thing. This is important. These blankets are easy to make. Fasten them by strings, tied at the neck, around each hind leg, and under the belly by the fore legs.

As the calf grows these strings can be let out. My calves have grown and worn these blankets until they were a mere patch on their backs.



These Kiddies Depend Upon You For Milk.

This group of refugees is typical of the bulk of the Belgian people to-day. Their faces show pitifully the hardships they have undergone in the last two years.

Most pathetic of all are the children. Thanks to the splendid work of unselfish philanthropists, they are being fed well. But apart from this there is little that can be done for them. It is impossible, for instance, to supply them with homes, or with those useless but delightful gifts that characterize the holidays in more fortunate lands. Least of all can these children know the joy that comes of making such gifts.

Surely in these circumstances the least the people of the British Empire

can do is to see that the Belgians and their babies are fed. And this they have been doing. British, Canadians and Americans have responded nobly to the call, and have kept alive the nation that saved them from the Germans.

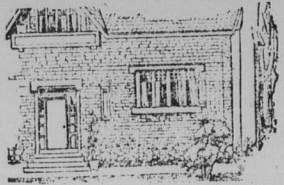
In full confidence that they will continue their generous gifts the Belgian Relief Committee is reminding us that every day of the year as long as the Germans are in Belgium it is necessary that food be supplied to the grown-ups and the kiddies of this stricken land. Contributions for this purpose may be sent to the Central Belgian Relief Committee, 59 St. Peter Street, Montreal, or to the local offices in each community or district.

ROOFING FARM BUILDINGS

The Cedar Shingle, Standby of a Past Generation, Giving Place to Lightning-Proof, Spark-Resisting Metal.

By W. E. Clark

Fifty years ago, when good cedar stock was in abundance and labor cheap, the farmers used to manufacture their own shingles by sawing, splitting and shaving, and there are many roofs yet throughout the country where split or shaved cedar shingles were applied fifty years ago. These shingles were generally about 3/4 to 1 1/2" thick, but time and weather have reduced the thickness of the exposed portions to that of cardboard. Under the natural tendency of things, however, the days of split or shaved cedar shingles are passed, and in recent years the shingle became the product of the saw mill, and the manufacturers of shingles were not so particular as to the kind of stock they



used as was the farmer who laboriously made his own supply. The outcome was that shingles were put on the market at a price which commanded trade but gave much less satisfaction, and many a farmer who could afford it replaced his cedar shingles with galvanized iron in one form or another.

Until recent years, however, a galvanized iron roof was a luxury, but the introduction of modern machinery has reduced the cost of galvanizing to a minimum and it is now possible to get a substantial and almost everlasting roof in the form of metal shingles at a very moderate cost.

One feature of the Metal Shingle and Roofing is that it does not take an expert workman to apply it. Any unskilled buyer with a moderate degree of adaptability, a pair of snips and a hammer can apply these up-to-date shingles as well as sheet roofings and siding.

Probably the greatest virtue of the metal roof is that the risk from fire

and lightning is minimized by its use. Inducements in the way of reduced premiums to encourage the use of galvanized covering, as a building with such a roof, properly connected to the ground by a water spout or a wire contact, is proof against a lightning bolt, and burning embers from another fire can do it no damage.

Metal shingles are light in weight. While wooden shingles average about 250 lb. to the 100 sq. ft., slate about 600 lb., a first-class Metal Roof does not average 100 lb., thereby lessening the needed strength of the superstructure and trusses. Then, too, heavy and wet snow will not remain on sloping metal roofs, whereas it attaches itself to wooden shingles as readily as plaster does to lathing, and this snow load averages sometimes 60 lb. to the square foot.

When speaking of durability of a metal roof, galvanized materials only are referred to. Farmers in this country, nearly twenty years ago, applied painted roofing, and the repainting of this roofing, which in some cases should have been an annual affair, was neglected, and the consequence was that corrosion set in, and the roofs rapidly deteriorated, but this is not the case with Galvanized Roofing. In the rural districts, where sulphurous acid gases are not prevalent, a Galvanized



Roof made of good material and properly applied should give satisfaction for half a century at least.

In the march of progress a rapidly growing number of farmers, recognizing the merits of metal, are now adopting, as a safeguard against fire, lightning and decay, many forms of sheet metal products, such as metal roofings, sidings, ventilators, silo covers, etc., thus reducing risk as well as maintenance cost.

Intelligence can solve it here. The fact is what matters most: God "gives" to his son all who are willing to hear his call, and the son will never reject them.

Horse Sense

Impaction of the Colon may be present for some time without marked symptoms, then slight, colicky pains. Sitting on haunches, pressing croup against any solid object, little or no passages of feces, a general fullness of the right side of the abdomen, are other symptoms.

Give a purgative, follow by 2-dram doses of nux vomica 3 times daily, feed bran only. I've rectal injections. If pain be well marked give 2 drams solid extract of belladonna.

Oats is the principal grain for horses, but a little bran or oil cake might profitably be added to put the horse in condition. Boiled oats might be fed occasionally, and care must be taken not to overfeed on hay.

Don't buy a field implement without a spring seat. Why? Because if you come in leg-weary from the field the chances are the horses will not get the attention they should have in the way of grooming after a dusty day in the hot sun.

Cribbing is a vice that is hard to be kept in a box stall without mangers or racks. In the majority of cases the vice can be checked by buckling a strap rather tightly around the horse's throat. Do not have it so tight as to interfere with breathing or swallowing.

Wheat must be fed carefully to horses in order to avoid digestive troubles and skin eruptions. As the kernels are small and hard they should be rolled for all farm animals. If ground too finely the meal must be mixed with coarser feed to avoid forming a pasty mass in the animal's mouth. Wheat has feeding value about equal to corn, but, for horses, oats are preferable.

Poultry

Charcoal sharpens a hen's grinders. The colder the day the more corn needed.

A salad of chopped cabbage puts a good keen edge on the bird's appetite. If you can't get milk maybe you can get whey. It isn't quite up to the mark of milk, but it makes a fair substitute.

Cracked corn should be sifted before being fed to the poultry; the amount of meal saved will more than offset the labor.

Growth and development require both quantity and quality of food, in order to build up good solid frames and give strength and vitality to the growing stock.

Don't let any cabbage or other roots go to waste. Tie a stout string around the roots of several cabbages, and hang them in the hen-house so that the hens can just reach them nicely.

Have you ever found hens on the floor under the roost, dead?

Your Problems

Conducted by Mrs. Helen Law

Mothers and daughters of all ages are cordially invited to write to this department. Initials only will be published with each question and its answer as a means of identification but full name and address must be given in each letter. Write on one side of paper only. Answers will be mailed direct if stamped and addressed envelope is enclosed. Address all correspondence for this department to Mrs. Helen Law, 75 Castle Frank Road, Toronto.

Mrs. F. M.:—1. If lemons and oranges are placed in boiling water or in a hot oven for five minutes before squeezing the juice can be easily extracted. 2. Vegetables should not be served in individual side dishes, but should be placed on the dinner plate with the meat. 3. A child's Tam o' Shanter hat after being washed should be stretched over a dinner plate to prevent it from shrinking and losing shape. 4. Cornstarch added to the flour for pie crust will make it more flaky. If you are using pastry flour add one tablespoon to every cup of flour; if ordinary flour add two tablespoons to every cup. 5. The task of washing the family handkerchiefs is easy according to the following method: In a vessel containing at least two gallons of warm water, put four heaping tablespoons of any good soap or powder dissolved and one tablespoon coal oil. Plunge soiled handkerchiefs into this and bring slowly to a boil, then put them into clean strong suds and very little rubbing either by hand or machine will make them snowy white. 6. Colored clothes should be ironed on the wrong side. 7. Boil a slice of raw potato in fat which has been scorched or has a burned taste and the flavor will be restored. 8. Sprinkle starched clothes with warm water to make them stiffer.

F. R. E.:—1. If you wake tired it is probably due to one of the following

causes: (a) insufficient sleep; (b) the poisonous influence of stale air in the bedroom; (c) a late and heavy supper; (d) general nervous condition. Remedies for the first three are obvious. For the fourth it is usually sufficient to rise promptly, to dress briskly, thereby improving the circulation, and to take a nourishing breakfast. 2. To gain weight, eat raw eggs and milk, cream, rice, cereals, olive oil and grape juice, butter and starchy vegetables.

M. M. R.:—1. Towels which are to be given to a prospective bride should be embroidered with the initials of her maiden name, not that of her prospective husband. 2. Nothing you could give your college friend would be more highly appreciated than a knit or crocheted set of Afghan and pillow in the university colors for the inevitable college couch. A pennon made of felt in the colors is also most acceptable.

G. H.:—1. David Lloyd George was born in Manchester, England, in 1863, of Welsh parentage. His father, a poor and invalid schoolmaster, died in early manhood, and David was brought up in humble circumstances by an uncle in Wales. 2. To ventilate a room without draughts, take an old window screen, stretch thin muslin or cheese-cloth across it and tack it in place, and put it in a window as you would a fly-screen. 3. A secretary "pro tempore" is a secretary "for the time being."

Sheep Notes

Don't give the ewes corn. Corn makes them feverish and inflames the udders. Inflamed udders are a bad thing at lambing time.

Neither crowd nor pinch the sheep in fodder.

An unruly ram is a good candidate for the meat shop.

A ewe that is soon to yearn should not be too fleshy.

If your neighbor keeps sheep of the same breed as yours, be sure to have yours marked. Sheep will break out sometimes, and if two flocks become mixed it is a hard matter to divide them.

The right kind of sheep in a neighborhood where there are the right kind of dogs ought to be a winning proposition. Unfortunately opinions differ as to dogs.

Silage is sometimes fed in small quantities to sheep with fairly good results. Be sure the silage is of good quality, not moldy or soured. Start on a very small quantity daily and gradually increase. Start giving a pound or two to each matured sheep daily. Pregnant ewes have been fed up to four pounds or four and one-half pounds daily with no bad results. Of course, clover hay and a few oats and if possible a few roots should be fed as well. Be sure the silage is good. Under no circumstances feed sheep spoiled silage.

USE OR LOSE, THE LAW OF LIFE

God Rewards a Man, in Himself, If He Will But Make an Honest and Earnest Effort To Do His Best.

"Then he which had received the one talent came."—Matt., xxv., 24.

Most of us, I am sure, sympathize with this one talented man, because most of us are one talented persons ourselves. We feel that this man was not treated fairly. It does not seem just to expect a man to accomplish anything with one talent when another has been given five. Most of us have felt the temptation to try to hide behind our own littleness. When a man discovers that he is one talented, and that the chances are he will never rise very high or accomplish great things, there comes a period of discouragement when he feels that it is useless to try. A young man enters college with exalted dreams of what he will accomplish in the world. He will be a great scientist. After a time he discovers that he has not the ability that many of his companions possess. They do with ease what he can accomplish only with prolonged effort. So he says to himself:—"What is the use? I can never successfully compete with these men. Therefore I will not try." Or one starts in the business world saying:—"I will amass a fortune. I will become a power in the financial world." He discovers soon that other men have more ability than he, know how to organize industry, have the faculty of foreseeing the market. He cannot compete with them, becomes discouraged and ceases to try.

Struggle To Be Maintained

Are we to excuse such people for giving up the struggle? Well, God does not excuse them. The same law operates with reference to them as in the lives of two talented and five

talented people. Use or lose. If you will not use to the utmost the ability you possess it shall be taken away.

The trouble with the one talented man was that he had not done his best. He was assigned a certain task and neglected it. It was not that he lacked opportunity. He did not have the excuse that the times were hard. Business was good. His fellow servants had each gained a hundred per cent. Yes, business was excellent. But he comes haltingly to make excuse for failure. Notice the mock modesty. Notice the false position in which he undertakes to place the one who has trusted him:—"I knew thee that thou art a hard man, reaping where thou hast not sown, and I was afraid, and went and hid thy talent in the earth; lo, thou hast that is thine."

No Excuse For The Cowardly.

That is a misrepresentation. By his dealing with these other two men the master proved that he was not "hard." God rewards a man, in himself, if he will but make an honest and earnest effort to do his best. It is only the cowardly and the indolent, the "slackers," that He appears to be a hard master. So the master takes the servant at his own word. "If thou knewest that I was a hard master thou shouldst have taken so much the more pains to please me." There is no excuse for the cowardly.

When we have done our best God is continually saying, "Well done." When we have not done our best we must suffer the consequences. The penalty is this:—"Take thou the talent from him!" Use or lose. That is the law of life.—Rev. Frank Oliver Hall, D.D.