

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—G. H.:—If I plow in a full crop of clover, would I have to do this in the summer to get the full benefit of it, or would it be as good if I let it grow on till the fall? Or, on the other hand, would it be as good if I took a crop and plowed in the aftermath? I have no stock except fowls and two horses, therefore little stable manure. However, I intend to use a lot of phosphate.

Answer:—At the present price of food and its universal scarcity in most sections, I would advise G. H. to feed the first crop of clover and plow in the aftermath. If he does not have enough stock to consume the clover it will pay him to make the hay and sell it, and to buy feed and plant food in the form of fertilizers. Since he has little manure I would advise him to use a fertilizer containing 2 to 4% ammonia, 8 to 12% phosphoric acid, and if he intends to plant potatoes, truck or root crops, from 1 to 3% potash. This will supplement the plant food in the soil and that turned over in his clover. It is very questionable, and especially at the present price of practically all farm feed and produce, if anyone can plow under a full crop of clover or any other cover crop, for that matter. Apply the fertilizer at the rate of 200 to 400 lbs. per acre.

Question—H. B.:—What distance apart should the rows of Indian corn be planted and what distance in the rows? How many kernels should be put in a hill? I wish to get as much ripened corn as possible.

Answer:—The farther south we go the farther apart the rows of corn

and the greater the distance between the hills. For instance, in the Southern part of the United States the rows are frequently five feet apart and four feet between the hills. As we come North this is reduced to at least 36 inches and some men even plant closer.

The number of kernels to the hill and the distance apart depends very largely on the type of corn and the fertility of the soil; ordinarily the richer the soil the closer the corn can be planted.

H. B. says he wishes to get as much ripened corn as possible. If he does not care for the size of ears he can plant much closer than if it is large ears that he desires. The Nebraska Experiment Station, U. S. A., found that 3, 4 or 5 stalks to a hill gave practically the same yield but the weight of ears was less with four than with three and still less with five than with four. One plant to the hill gave but two-thirds as much corn as did three plants. Two plants gave 10 bushels less to the acre than did 3, 4 or 5. The corn was planted in hills three feet eight inches apart each way.

I would recommend that H. B. plant his corn 36 inches apart each way, unless the soil is extremely fertile, when he might plant a little closer, and plant three to four kernels to the hill. If he wishes to drill it, the stalks should be ten to twelve inches apart in the row, unless the soil is exceptionally fertile, when this distance may be reduced to 8 to 10 inches.

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INTERNATIONAL LESSON
APRIL 29.

Lesson V. Jesus Welcomed As King
—John 12: 12-26. Golden
Text—John 12: 13.

Verse 12. The common people (margin)—John is sharply distinguishing the masses from the "classes."

13. The branches—Specially associated with the Passover, the most joyous of the Feasts. Hosanna—"Save!" (Psa. 118: 25), a prayer addressed to God. It had come to be used rather like our "Hurrah!" but with a religious tone, like "God bless you!" He that cometh—The Messiah, in the name—Join with Blessing.

14. Found—Mark tells us how. This was a case of deliberate fulfillment of prophecy; he would claim before the people the peaceful royalty that the animal suggested. The horse being the symbol of war—it was used for nothing else—the use represented peace; there is no suggestion of lowliness about it, however true it is that he came in humility (Matt. 21: 5).

15. See Zech. 9: 9. The context is all concerned with the abolition of war. Is not this the kind of "Second Coming" that we are called to think and pray and work for? It is an intensely practical ideal—which is more than can be said for some "Second Advent" dreams.

16. Glorified—For John this "glory," or complete self-revelation, culminates on Calvary.

17. The crowd that saw the great Sign is busy telling those who had not seen it.

18. Here is the turning point of the story. The Pharisees are everywhere the Lord's real enemies, who won their purposes by making the powerful but apathetic hierarchy do

their foul work for them (John 11: 47-53). Here they are pictured as in despair. No more vivid evidence could be given of the completeness of his triumph. They little knew that the appalling deed they contemplated was to be the Divine way of truly enthroning him over the world—a vaster world than they could see!



The man who keeps cows is well fixed for raising hogs.

Hogs will eat alfalfa hay, and pay well for it. Tia was proved the last winter on many farms where economy was practised by substituting hay for part of the corn and tankage or other millfeed which it was customary to feed.

It is essential that the brood sow be fed a well balanced, succulent, nutritious, milk-producing ration while suckling the litter. Dairy by-products, such as skim-milk, buttermilk or whey together with meals such as shorts, ground oats, barley, oil cake and the like, are all highly suitable for the feeding of the sow at this season. These are also splendid feeds for the litter at weaning time. Dairy by-products are not available, digester tankage may to some extent supplement these feeds.

Kitchen slops, ground barley and shorts formed the greater part of the ration of a pig which took first prize at a recent show. The pig had the run of an alfalfa pasture, with a stream at the foot of the hill in the same lot.

The Height of Boastfulness.
"Isn't Blower inclined to be just a little boastful?"

"Boastful? Well, I guess yes. After a beggar has touched Blower for a nickel, he will tell you that he has just been giving a little dinner to an acquaintance of his."

SWEET CHERRIES: SOILS AND VARIETIES

G. A. Robertson, St. Catharines.

Sweet cherries are yearly increasing in popular favor; and this popular favor will increase or diminish only as the product put on the market is good, thereby increasing the demand; or poor, thereby decreasing the consumption. Not many years ago the sweet and so-called sour varieties were marketed at practically the same price per basket; the sweets are much more difficult to produce and to market than the common or sour varieties; and an impetus was given to planting the sour cherry at the expense of the sweet; since then the sour cherries have decreased steadily in price and the sweet have increased until now a sweet cherry orchard full bearing is a decided asset to any farm.

Location: Sweet cherries should be planted on a deep, dry, well drained soil. No other tree fruit will respond any better to good treatment, but planting on an unsuitable soil is disastrous, and a wet subsoil will prove fatal. Therefore, when choosing a location, a high, dry, sandy, or gravelly knoll is best, and a proper system of underground drainage will prove beneficial. Close proximity to a town where a requisite number of good pickers may be had, and frequent and rapid shipping facilities is desirable.

Sweet cherries bloom very early, varying in the last few years from say as early as the 22nd of April, and sometimes as late as the 19th of May. Most of our popular varieties bloom

heavily and set freely; when in full bloom a few hours of hot sunshine assisted by the presence of myriads of bees will set a fair crop. This may be followed by a week or ten days of cold wet weather, with perhaps a few degrees of frost, but if properly set the calyx of the blossom forms a little blanket to protect the tender fruit, and this drops only as the cherry swells or as the stem of the improperly fertilized fruit shrivels and drops; hence planting an orchard near a body of water which will modify the temperature, will often insure a crop when a few miles inland the few degrees difference in temperature may shorten it materially, if not destroy it entirely for the season.

Varieties: In choosing the varieties from a commercial standpoint, annual bearing is the most desirable, and coupled with this a fruit that is good size, color and flavor and also good in shipping quality. The tree should be a rapid grower, strong and hardy. The varieties that so far I have tried that conform to this standard named in the order of ripening are: Black Tartarian, Sweeten, Blagayear (white), Elkhorn and Windsor. I have also fruited Lombard which ripens after the Windsor, and is providing, being of good size and flavor, and I may also add Blue, 1/4 of these being grown in the West, the latter ripening about the same time as Elkhorn, and is an excellent flavored cherry.



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, 235 Woodbine Ave., Toronto.

A. M. S.:—1. In the vacant spots in your flower border plant perennial phlox in white, pink and yellow. They like the sun. It is always wisest to buy large plants. 2. Spraying is the best way to water plants. This not only keeps them clean, but, as you know, plants absorb moisture through the pores of their leaves, and they are therefore much benefitted by spraying. 3. Dahlia roots should not be put into the ground until the weather is settled and the ground warm. They are very liable to rot in wet and cold ground. 4. Did you ever try cannas for the large bed in the centre of your lawn? Cannas being large plants need space to show up to the best advantage, and require very rich loamy soil and heat. The flowers are very showy, but are not suitable for cutting as they are so tender and easily bruised. If the bed is eight or ten feet in diameter, place a ricinus (castor oil plant) in the centre, surround with two circles of cannas, say, the inner circle King Humbert, outer Alphonse Bouvier; and geraniums for the base or outside circle. As the canna is a tender plant it cannot be transferred to the permanent bed before June 1st. It flowers during July, August and September. Be careful to cut out all dried blooms and seed pods. It encourages freer blooming.

K. McL.:—1. Here is a remedy for brittle nails which I hope you will find effective: Oil of pistache, 1/2 ounce; refined table salt, 1/2 dram; powdered resin, 1/2 dram; powdered alum, 1/2 dram; white wax, 1/4 dram; carmine, 1/4 dram. Rub well into the nails at bedtime, also after bathing the hands. 2. Lotion for red, oily nose: Sulphur precipitate, 1 dram; spirits of camphor, 1 dram; glycerine, 1 dram; rose water, 4 ounces. After bathing the nose in very hot water, mop the lotion on with absorbent cotton. 3. The amount of water required by the body daily is sufficient to balance the loss through the skin, kidneys, lungs and other excretory organs. This has been shown to be about two and one-half quarts, the amount depending much upon the temperature of the air

and the amount of work done. Part of this water is derived from the food. 4. A good ointment for dry skin is made of lanolin, two ounces; boroglyceride, one ounce; cold cream, six ounces. 5. Whether one should drink hot or cold water before breakfast depends upon whether the gastric juice is too acid or not sufficiently acid. If one's stomach does not make enough hydrochloric acid, she should drink a little cold water half an hour before meals, because this will stimulate the gastric glands. If one has too much acid she should take a glassful of hot water half an hour before eating.

H. M.:—If your little girl's school reports are not so good as you would like, the reason may lie in her physical condition. It is not at all likely that she is wilfully lazy and inattentive. The first step should be an examination for eye defects, adenoid growths, dental diseases, and things of that kind. If she is free from these, it will be necessary to look elsewhere for the cause of her failure to do well at her studies. In the first place, is she properly nourished? Does she take just the right quantity of food at meals and of the kind suited to her age? She should not be permitted to nibble between meals or to have too much candy. Too much food causes poisoning of the brain, while too little or of unsuitable variety causes the brain to function freely owing to lack of nourishment. In the second place, are you allowing her to have too much "fun" out of school? If she remains up late at night, and does not get sufficient sleep in a well-ventilated room, she will be unfit for school work because of physical exhaustion. As to automobile rides, it is true that they furnish plenty of fresh air which is good, of course, but long and frequent rides keep the child in a state of nervous tension and excitement, which is the reverse of good. In short, the manner in which you are bringing up the child must be scrutinized to discover the cause of her backwardness at school.



The Rainy Day.

I want the sun to shine again,
I want the rain to stop.
It marches like the feet of men—
Drop-drop, drop-drop, drop-drop!

I do not like the rain a bit,
I do not like the mud.
The cows all turn their backs to it,
And sadly chew their cud.

I press my nose against the pane
Until my nose is flat,
But all I see is just the rain—
Pat-pat, pat-pat, pat-pat!

I want the children out again,
I want the weather fine.
I don't know how to wait till then—
I want the sun to shine.

When I Spank My Dolls.

From my dolls I have chosen three
(whom I consider sisters) of whom I am going to write a story. Emmeline, who is the oldest, is a lovely girl with long, dark curls. Unfortunately she has a high temper. The next in size is Winifred, who is quite different from Emmeline. She has short light curls that shine in the sun like gold. Winifred has a very loving disposition. The youngest daughter, Laura, has short, brown curls. She is a sweet, mischievous little girl.

One Wednesday we had planned to go on a picnic. Wednesday dawned bright and clear. We were all dressed, the lunch was packed, when Winifred suddenly exclaimed: "Where is Laura?"

"Where was she? The naughty girl! I will tell you."

Little Laura had been told by her mother never to go near the flypaper. Now Laura had not meant to disobey. She just thought she would like to see the court flies on the flypaper before she went on the picnic.

"She knew where a sheet of flypaper was, so she went into the parlor, which was dark at that time. Little Laura climbed over a cushion on the floor and she fell. Her head went into something sticky. Now she knew!"

Laura was frightened. She ran upstairs and hid in a closet her pretty brown curls one sticky mass.

They hunted everywhere. At last Emmeline looked in the closet where poor Laura was hidden.

"Laura, how dare you! You're a nice girl! What has happened?" she cried. With that she pulled Laura out and was shaking her in a high temper, when I, their mother, came in. Emmeline burst out and when she saw me she let go Laura and looked very much ashamed. Laura was frightened and asked me if she was going to be spanked, but I said, "No, Laura,

you do not deserve to be spanked. Emmeline does."

I then took Emmeline, who was crying, and spanked her and put her to bed.

Laura came and told me the story. Then I took her and Winifred to the barber shop, where Laura's curls were cut off. When I returned, Emmeline said:

"Mother, aren't you going to punish Laura?"

"Look at her, Emmeline, and tell me if you do not think she is punished enough," I answered.

Emmeline looked at Laura, who was standing there feeling the head which the barber had robbed of its curls. She was crying. Emmeline really felt sorry for Laura and promised that she would not have "temper" again and she didn't. Laura was never mischievous again. We all missed the picnic that day!

LEANING TOWERS OF BOLOGNA.

Intended For Fortified Homes By Builder in Past Ages.

Italy is a land of many leaning towers, among which the Tower of Pisa and the fallen campanile at Venice are the best known. The strangest of the leaning towers, however, are the Torre Asinelli and the Torre Garisenda in Bologna, which were erected in 1109 and 1110 A.D. The builders intended them for fortified homes, of which Bologna at one time possessed as many as two hundred. The gloomy, smooth-walled brick towers standing side by side make a strange impression upon the person who looks up at them from the ground. Dante, in his Inferno, compared the giant Anteus, who was bending toward him, to the Torre Garisenda "when a cloud passes over it."

The Torre Asinelli is three hundred and twenty feet high and contains a rough staircase of four hundred and forty-seven steps. From the summit, which is four feet out of plumb with the base, you have a fine view of the city. The lean is unintentional, and was probably caused by the sinking of the foundations. Torre Garisenda is one hundred and sixty-three feet high, sixteen feet lower than the Leaning Tower of Pisa, and it is two feet out of plumb, only three feet less than the Tower of Pisa.

When Ottavio Garisenda began to build in 1110 A.D., he apparently wanted his house to surpass his neighbor Asinelli's in solidity; and so he intentionally made his tower out of the perpendicular. He found it impossible, however, to complete the tower at that angle, and had to cease work on it before it attained the height of its companion.

It has been shown that heredity in a child is not so important as good soil and cultural methods. Good seed, good soil and good farming count for more in crop producing than fancy variety.



That some source of sediment in milk does obtain even under the most rigid conditions possible in a cow stable is evident from an examination of any sediment disk through which the average milk has been passed, and there is no doubt that thorough straining will add to the cleanliness of the product even after all possible precautions have been taken. The presence of slime in the separator bowl after skimming is another sign that some dirt has found its way into the milk between the time of its secretion and its arrival in the machine provided the receiving or supply can has been clean up to the time when separating started.

The separator no doubt removes a great deal of the foreign matter that occurs, but is incapable of throwing out much of the undesirable bacteria that accompanies the dirt which enters the milk at milking time, so the importance of cleanliness in caring for the cow and for the milking utensils is very great indeed.

The assurance that milk delivered at the dairy, where pasteurization takes place, is free, or reasonably free, of sediment, should be worthy of consideration by the wholesale purchaser who, in his turn, should reap a benefit from the ultimate consumer to whom he can guarantee this milk as having been clean, and thus safe from the time it leaves the cow's udder until it arrives at the consumer's residence.

The farmer's part of the undertaking to supply pure, wholesome milk must start with the taking of precautions previous, even to the secretion, of the milk. He should satisfy himself fully that his cows are entirely healthy; and in order that the small amount of dust that will inevitably get into the milk pail may be as harmless as possible, he must provide for a plentiful supply of sunlight in his tables. Then if the cattle are always kept as clean (or a little cleaner) all the year round, as they would keep themselves on a good, well-drained pasture field, and the milkers obliged to wear well-washed clothes, and take a bath frequently, the chances of the milk being satisfactory are pretty good. Of course, aeration of the milk and thorough cooling must also be attended to.

Small Fry.

The teacher believed in keeping the youngsters in touch with the history of the times, and was beginning a lesson upon the Russian Royal Family. "Now who can tell me what the Russian monarch is called?"

"The Czar," bellowed the class.

"Right! And what is his wife called?"

There was a pause; then two or three ventured:

"The Zarina."

"Good!" said the teacher. "Now I wonder if you know what the Czar's children are called."

A longer pause; then one little voice piped:

"Czardines!"

To save labor in building roads a cart has been invented that spreads stone evenly as it is dumped.



Sell off all hens in their third year, as soon as the rush of laying is over. The last call for hatching is now on. Chicks hatched after the first week in May cannot be expected to prove good winter layers.

Brood chicks that are closely housed and fed too heavily are very likely to develop weight too fast in proportion to their strength.

It will cost the farmer no more money to raise pure-bred poultry than it will to grow scabs.

Turkeys do best when kept separate from chickens. If the two are kept together the turkeys are likely to take chicken diseases.

Dampness, lice and filth are deadly foes to poultry of any kind.

Since hens on range produce more eggs at a lower cost and fewer young hens die than do those kept in confinement, poultrymen are urged to provide outside yards with plenty of green feed for laying hens. Hens on range produce 15 to 44 per cent. more eggs at a feed cost of 15 to 36 per cent. less per dozen than hens kept in confinement.

In Spring fowls require more careful attention than at any time in the year. All the accumulated debris of winter lies on the surface. Then comes a warm spell, and the surface of the ground gets muddy, while the filth of winter sticks to everything that touches it. This is the time to keep the hens dry and to give them straw to stand on and to work in during the day.



There are two forms of strangles or distemper, viz., regular and irregular strangles. The symptoms of regular form are: cough, unthriftiness, fever, difficulty in swallowing, nasal discharge, swellings between jaws or about throat, which form into abscesses. In irregular form the same symptoms occur, with less difficulty breathing, and the abscesses may form any place, externally or internally.

Attend to comfort, apply poultices of antiphlogistine to throat, lance abscesses as soon as ready, give 2 or 3 drams hyposulphite of soda out of a spoon 3 times daily, do not drench. If breathing becomes very difficult send for veterinarian.

Go easy with the horses at the start and see that collars fit.

Mares in foal should be given regular work but not overwork.

Farm horses usually could haul larger loads on the country roads if wagon tires were wider, and less damage is done to roads by wide tires.

Different horses require different kinds of foods, the same as different people; study each horse and see what kinds of food he does best on.

It is a lot better and cheaper to feed and care for stock so that they will be in good health, than to pay a doctor to get them back to the standard after they once get down.