Farm Crop Queries

Conducted by Professor Henry G. Bell.

Henry G. Bell.

The object of this department is to place at the service of our farm readers the advise of an acknowledged authority on all subjects pretaining 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 mailsd direct.

Summer Pasture

F. J. R.—My pastures played out just when milk was selling best last summer. Can you suggest any way of keeping up summer pasture?

Answer:—I would advise your trying the O.A.C. temporary pasture mixture. It is:—

Oats . . . . . 51 lbs.
Early Amber Sugar Cane . . . . . 30 lbs.
Common Red Clover 7 lbs.

88 lbs. per Acre.

Prof. Zavitz says to sow this early in May. The oats and Early Amber Sugar Cane seed can be drilled in through the regular grain drill and the clover seed through the grass and clover seed division of the drill. At Guelph they found this pasture ready for cattle pasturage late in June. This pasture carried more than one steer to acre, and in 1911 was successfully used for milk cows.

Potato Yields Low on Account of Blight

G. B.—My potatoes were a failure last year. So were those of my neighbors, to a large extent. They were planted about the middle of May and seemed to come along well till early July when they seemed to die down. Some sent up single stalks which were short and weak. I scarcely got back seed. What was the matter, and how can I get better crops next year?

Answer:—Without seeing the field or sample of the crop, it is impossible to say with exactness, what the trouble was. From your description I am assuming that it was the deadly Late Blight Disease of potatoes. This disease sometimes sweeps down upon what looks to be a healthy field and destroys great areas in a short time.

Moist weather is best for the spread of Late Blight. It is usually indicated by the development of indistinct, dark, watery spots on the leaves. As the disease develops the leaves turn a sickly brown color and the disease may extend to the branches of the plant. The rotting potato tops give off a characteristic disagreeable odor.

Late Blight is a fungus disease which winters in the stored potatoes. It sends its threads up through the inside of the potato plant and blossoms on the surface of the potato leaves, giving off millions of spores or seeds. These are easily blown about by the wind and in damp weather they stick to moist potato vines and leaves and attack new plants.

The cure or preventive is to spray the potato crop with Bordeaux mixture or some commercial fungicide just as soon as the first leaves are well spread out and continue spraying till the crop begins to ripen, giving in all 5 to 7 sprayings. Bordeaux mixture is made of 5 lbs. of copper sulphate, 5 lbs. of quick-lime and 50 gallons of water. The 5 lbs. of copper sulphate should be dissolved in 5 gallons of water and the 5 lbs. of lime should be dissolved in another 5 gallons of water, then the two should be dumped into a clean water-tight barrel and 40 gallons of water should be added.

The solution of sulphate of copper and lime is deadly to the scores or seeds of the Late Blight disease.

If there is a small infection anywhere near your farm, it will spread very quickly during damp, warm weather. Late Blight stops growth and causes dry rot in the stock that is dug. The biggest and best potato growers on this continent always spray their potatoes to control this disease.

The Dairy

It is hard cash sifting out of the pocketbook if the liquid manure is not saved by absorbents, or by being drained from tight floors to a cistern outside the stable.

Be sure that the rats are not robbing the cows of their grain.

Keep a good cat in the barn, and give it warm milk in its own dish—and keep the dish clean.

Comfort is the key-note to success. No cow can be comfortable if half starved and cold.

Cows sometimes get so smart that they can lift the latch of their stanchions with one horn. Pretty good argument for a sawing match. If you do not resort to that measure, fasten the latch down tightly every night and tie it.

If a cow has to be taken any distance, it is far cheaper in time and in beef to carry her on a wagon or sled, using a pair of horses, than to drive or lead her unwillingly.

The barn should be as quiet as a Quaker meeting. Many men get into the habit of yelling at the stock without being conscious of it, and keep the animals stirred up when they should be quiet for their own and their owner's good.

Hogs

Cold floors can not be covered deep enough with straw to make the hog comfortable. He is a great rooter and will get clear down to the bottom of his straw bed. So cement or stone floors are not so good as plank.

Old-fashioned hog-pens had altogether too much light on one side, being all open to the weather. Then they went to the other extreme and were shut up, close and dark. Windows are just as good for the hog's health and comfort as they are for yours and mine. Money spent for window-glass for hog houses is money well invested. Just watch the porkers as they lie where the sunshine comes in good and warm. Then is when they are putting on fat.

Salt and sulphur and charcoal should be kept in every pig-pen and pig yard so the pigs can help themselves.

This is a corrective and a preventive of worms.

Do not confine the brood sows in a small dark pen. Give them plenty of room, and a yard to go out to every fine day. Brood sows must have exercise to insure strong healthy litters of pigs.

Whatever makes the feed taste better increases its value as growth ration for pigs.

Since new telegraph cables to Ceylon have been opened messages have been transmitted from London within half an hour.

Horse Sense

If a horse takes a chill, followed by colicky pains, shows stiffness and soreness, stands all the time, groans if made to move, is sore if pressed between the ribs which are fixed, and has a short, dry, painful cough, he probably has pleurisy.

If much pain at first, give colic drench, apply mustard to sides, give nitrate of potassuim in 2-dram doses in water 3 times daily. If pulse becomes weak, give 2 or 3 oz. doses of sweet spirits of nitre in a pint of water every 3 or 4 hours as indicated.

Horses that have been fed highly on grain for a long time, and begin to run down, can and have been toned up by the molasses and hay treatment.

The horses should be shod regularly or not at all. Shoes may stay on longer in Winter than in Summer, provided the shoes keep in condition.

Many a man has become bankrupt by thinking he could make his fortune in horses, when as a matter of fact there was no horse in him. To succeed with horses a man must love horses, he must have a lot of horse sense and he must be willing to study and learn.

Something wrong when a horse eats his own bedding. Leave out the straw and use sawdust or some such thing; then correct the ration. Give a better, all-round line of feed.

A quiet voice of approval and a gentle pat occasionally make the horse more tractable and serviceable.

One great reason for boys leaving the farm is that Willie's colt grows up to be papa's horse.

Never strike an animal when you are angry, nor when he is. If you do not, you will never strike him. This advice is as good when applied to striking a man in anger.

Empress Eugenie's Work.

The Empress Eugenie is heart and soul with the allies, and is showing her sympathy in a very practical way. Every day she is suggesting and carrying out new schemes in the hospital which she established in a large wing of her house at Farnborough Hill. She has put up revolving huts in the park at points where the finest views are obtained, and when these are occupied by the officer patients she likes to see that they are properly adjusted to catch the most of the sunshine, and the least of the wind if it is chilly. There are tennis courts in the grounds, too. Despite her great age—she was 90 last May—the Empress calls at the hospital every morning to inquire personally of the patients if they are going on well. She brings them the latest books, and also puzzles, the working out of which is her own favorite pastime. The wounded men look for her coming, and she leaves smiles and gratitude behind her when she departs.

English Society Ladies Join in Tommy's Games.

Lady Charles Bentinck (left) playing dominoes with Lady Kathleen Hill (right), and some of her soldier-patients in the Mapperley Hall Hospital, Nottingham, of which she is the commandant. As a Lady of Grace of the Order of St. John of Jerusalem, she nursed in the South African War.

THE SUNDAY SCHOOL

INTERNATIONAL LESSON
FEBRUARY 13.

Lesson VII. Jesus Heals A Nobleman's Son—John 4. 43-54.

Golden Text—Matt. 8. 13.

Verse 44. He said this about Nazareth (Matt. 13. 57; Mark 6. 4; Luke 4. 24), but this Evangelist is applying it to Judæa, the Messiah's true "country."

45. There is a sharp contrast between the Galilæans who welcomed the Lord even because of his drastic treatment of the traffickers in the temple, and the Judæans whom that action had moved to impotent wrath.

46. King's officer (margin)—The word thus rendered is common in vernacular documents, especially official, where it denotes the "royal secretary"; in Roman Egypt he was deputy for the district commissioner.

47. Was come out of Judæa, repeated in verse 54, takes us back to verse 43—it is not the mere chronicle of a journey. Jesus had done a Messianic act in his royal capital: it had been only resented. As a prophet, he was winning more disciples than even John; in his "own country," this had brought him no recognition. So he solemnly changes the scene of his ministry, and Galilæans joyfully claim him as their own. Jerusalem would yet be his capital: there he would be "crowned with glory and honor" and "reign from the tree."

48. Signs—A technical word—deeds which are credentials. The temper of the people, agape for wonders, is suggested by the next word.

49. The intense earnestness of the father ignores the Lord's sad generalization, which he really uttered to draw out the man's faith: only a very powerful faith could achieve such a cure.

50. There is a resemblance to the story of the centurion, which has even been regarded as an independent version of this—a most improbable view.

51. The man seems to have started at once—like the lepers in Luke 17. 14—without another word. He had got on to the hill road that led down from the highlands to the town on the lake shore, when his hurrying slaves met him.

52. Began to amend is inadequate; the phrase answers exactly to our "got better." Seventh hour—This is the only New Testament book in which these precise time notices are given: see note on John 1. 39 (January 21). The watchers observed then—as we should put it—a sudden drop of the temperature to normal, the patient falling (we may suppose) into a quiet, natural sleep.

53. Believed—He "believed" before, so strongly that he went off to realize the promise. But faith always lives on new impulses, and the instantaneous result of his first venture lifted faith on to a yet higher level. Whole house, as in Acts 16. 15, 31. This gathering by families is very suggestive and characteristic. (It makes one think further of the gathering by villages we are seeing in India today.) A very attractive guess would recognize the mother of this grateful family in Johanna the wife of Chuza, Herod's steward.

54. The Evangelist closely connects the two Cana "signs," which may be combined under the great word, "I came that they might have life, and might have abundance."

The hottest place in the world is the interior of the Great Sahara Desert, Africa, where the thermometer rises to 122 degrees.

To have clean nests in the most inviting position in the poultry house is the best cure for the habit some fowl (especially pullets) have of laying their eggs on the floor. A couple of pullets took a notion early last month to deposit their eggs in a corner of the scratch pen. There were nests in the inner house, but they would not look at them. Then a nest box was placed near the spot where they were in the habit of laying. They laid in it the first day. When it was later removed to a more suitable location they immediately located it and continued to deposit their eggs in the nest.

Sheep Notes

Fine wool is more scarce right now than it has been in years. It may be more so a year from now. Stands us all in hand to do what we can to meet he demand.

It is no joke to say that there is more clean money in a pure-bred sheep than in a scrub. The why and the wherefore are not half so important to know as the actual fact.

See to it that you have the pay as soon as the meat man has the sheep or lambs. He gets his pay downtown the moment the goods are delivered. He should not ask you to wait. Many have done that and are waiting yet.

Be sure the sheep quarters are dry and cheery.

A cold, dark, damp place for sheep is death to them.

The sheep barn should be bottle tight with the proper ventilation, with big doors opening to the south.

These doors should be open on pleasant days, so the sheep can exercise in a sheltered yard.

Sheep do not mind cold when there is no draft, and the foid is dry and tight.

Do Insects Migrate?

One of the unexplained phenomena of animal life is the annual migration of birds, though the lines of their great flights have now been accurately mapped in both hemispheres. Mr. Howard J. Shannon, in an article in the Scientific Monthly, entitled Insect Migrations as Related to Those of Birds, maintains that many insects as well as birds make annual migrations southward in the autumn, following well-defined routes that correspond to those taken by the birds of the same regions. The insects include certain North American species of Diptera, butterflies and and dragon flies. Mr. Shannon believes that there may be a return migration in the Spring, but he is not sure whether such migrants are the same individuals that flew south in the fall or a new generation, bred in the southern winter quarters. Some idea of the magnitude of the migrations may be gathered from the statements of the author in regard to the monarch butterflies (Danais archippus), which "in mingled myriads move forward in swarms, forming a veritable crimson cloud miles in width, and streaming backward for equal distances, casting below them as they go perceptible shadows."

Had A Tongue Like A Woman.

The bell of a Scottish church was giving out a very poor tone, and a committee was appointed to inquire as to what was wrong and to report on the best means of putting it right. After an examination the members were divided in their opinion, and the kirk officer, who was in attendance with the keys, was asked his view. "Fine A ken what's wrang wi' the bell," he remarked; "it's a she yin"—meaning that it was of the feminine gender. Pressed to explain, he added, "It's tongue's owre lang—it's needin' to be clippit!" And this turnel out to be really the fault. The tongue had become loosened to the extent of an inch or so, and was overlapping the curve at the rim, and therefore not striking truly.

If paint and grease can be made to take the place of buildings without extra expense, then the only construction needed will be that of a fence to keep farm animals from doing damage to the machines left outdoors. In the long run there might be a loss of time in greasing a machine every time it has to be left idle, compared with the easier method of running it under a shed, but a careful man is likely to grease all parts that are liable to rust in any case, so if money can be saved by foregoing building, why not? The chief trouble is that one man, as a rule, uses both means of protection and another uses neither.

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, 25 Castle Frank Road, Toronto.

Mrs. G. H. :—May I ask three questions? 1. How can I open a fruit sealer that refuses to unscrew? 2. What will prevent mustard from drying up? 3. Is it possible to make a fireless cooker at home?

1. Set the jar upside down in sufficient hot water to cover the metal rim and in a minute or two it will unscrew with ease 2. Mix with vinegar, add a little salt, and it will keep fresh for several days. 3. Take a packing-box with well-fitted cover on hinges. Fill box with hay well packed down, leaving hole in the centre for saucepan, fill a sack with hay and place on top of saucepan, and close lid. A granite pail with a close-fitting lid and a handle is the best cooking utensil for use in a fireless cooker.

Miss Polly:—1. When a girl introduces a man to a married couple whose name should be mentioned first? 2. Should a letter of introduction be sealed and how should it be delivered?

1. You should introduce a man to your married friends in this wise: "Mrs. Blank, may I present Mr. Brown", and "Mr. Blank, this is Mr. Brown". 2. It should be unsealed. If a letter of introduction is written for a woman who is moving to another city she, on her arrival, mails it, together with her card containing her new address, to the person to whom it is addressed, who thereupon calls on the new comer. If a man has a letter of introduction to a woman he may call and deliver it in person.

Mrs. W. J. M. :—1. What is the best way to treat a kitchen floor? 2. What color scheme would you advise for a girl's bedroom with a large south window?

1. Cover it with a plain dark-colored linoleum and give a coat of polish once a month. 2. Blue is the best color for a sunny room. Combined with ivory it would be ideal for a girl's apartment. In the shops are many lovely chintzs in blues which could be used for over-curtains and cushions with charming effect.

School Girl:—I have to write an essay on Thrift, could you please give me a good definition?

Thrift is care and prudence in the management of one's resources, foresight, getting true value for what one spends, personal efficiency, looking out that nothing is wasted, proportioning expense to income. True saving is only a better form of spending. To save is not to hoard, which is one of the worst and meanest forms of waste. To save is to lend our resources to those who can make more profitable use of them. If we lend to the Government it can use these resources for national ends. If we lend to the banks, they do not hoard the money, they makes it serve, they invest it in trade and enterprise of all kinds. It is capital and capital means factories and mines and cultivated lands, the means of further production, the source of future wealth.

Stenographer:—Can you tell me the correct use of the comma, that is to say, which of these sentences is correct, "Tom, John and Henry are coming," or, "Tom, John, and Henry are coming."

It depends on what meaning you wish to convey. In the first sentence, Tom's attention is called to the fact that John and Henry are coming; in the second, it is stated that Tom, John, and Henry are all three coming.

ODD FACTS.

Damage by hailstones to crops throughout the world is said to average $200,000,000 a year.

The orifice of the whale's ear is scarcely perceptible, yet it is said that the whale's hearing is so acute that a ship crossing its track half a mile distant will cause it to dive instantly.

An addition to the flora of the British Islands has been found the montbreia—a near relative of the iris and a native of South Africa—which recently was seen in bloom between the stones of the beach at Cobb, near Lyme Regis, in Dorsetshire.

Once a year the hillsides of the Malabar coast of India are the scenes of great commercial activity when the lemon grass harvest is under way. Oil extracted from the grass is employed in the manufacture of artificial perfumes. The hillsides are burned over to destroy the old and useless grass. Six months later the fresh crop is ready to be cut, and at once the countryside is dotted with furnaces and stills.

The Starvation Point.

To the question, "If there were a siege, how long do you think the soldiers and civilians could live after the food supplies gave out?" an English paper answers: Science tells us that, if he can get drinking water, an ordinary man can exist for thirty days without food. At the end of that time, the machinery of the body will not be spoiled, and can be brought back to its former strength by careful feeding. About a quarter of our body weight is fat, and it is mostly this fat that is absorbed as food during the period of starvation. We can absorb and burn up our muscles until sixty per cent. of their weight is gone. We can do the same with from thirty to forty per cent. of our livers and digestive organs, and twenty per cent. of our lungs. Our hearts can lose ten per cent. and our brains and nervous systems can lose five per cent. It will be seen that the more vital organs—brain and heart—yield least of their valuable substance for the life of the body, while the less essential substances—fat, muscle fibre and so forth—are consumed first.

A weather-tight shed offers the advantage of some comfort to the owner in repairing or refitting his farm machines, and if forethought is used in the erection of the building space can be provided for a great number with the use of a comparatively small amount of building material. Provision should be made for hoisting some of the lighter parts, such as hay racks, wagon boxes, etc., while flooring that is high enough to avoid all danger from water should be arranged for the placing of heavy gear thereon. The machine shed may be floored above the rafters, so as to make a place for the storing of baskets or other lightweight matter and if a workroom is needed for making up crates or putting handles on baskets, such an upper storey can be divided and a portion made comfortable for working in on cold days by the use of a small heater.

From The Middle West

BETWEEN ONTARIO AND BRITISH COLUMBIA.

Items From Provinces Where Many Ontario Boys and Girls Are Living.

Alberta farmers met in convention in Edmonton, Jan. 23rd.

One thousand hogs were sold in Calgary for $12.05 each recently.

Prince Albert, Sask., made one hundred per cent. registration response.

Edmonton has sent forty-seven recruits to the Royal Canadian Naval Service.

Calgary Y.W.C.A. have largely attended classes in English for the foreign-born.

Thirty-nine men from Regina have joined the Royal Canadian Naval Volunteers.

John Crawford has been re-elected president of the Board of Trade of Moose Jaw.

A large quantity of wood has been cut from the forest reserves near Prince Albert, Alta.

W. J. Vancise was recently elected to the Saskatchewan Legislature from Lumsden district.

A junior branch of the Red Cross Society has been organized in the High school at Yorkton, Sask.

The Municipal Council of Forty-Mile Municipality is considering levying a land tax for patriotic purposes.

The Women's Auxiliary of the Grain Growers' Association held a successful convention at Brandon.

Calgary military headquarters are calling for thirty nursing sisters for Queen Alexandra Imperial Nursing Service.

A committee of representative citizens has been appointed at Moose Jaw to investigate the subject of civic taxation.

Charles H. Wheeler, for the past twenty-five years dramatic and music critic of the Winnipeg Tribune, is dead, aged 79.

The Doukhobor community near Yorkton, Sask., has promised a monthly payment of $250 to the Red Cross Society.

Lieut.-Col. Harwood, of Edmonton, has been appointed president of the board to inquire into the administration of Taplow Hospital.

About 200 farmers attended the opening meeting of the Manitoba Cattle Breeders' Association held at Brandon, Manitoba, recently.

Col. J. Stewart, M.P.P., for Lethbridge, commanding an artillery brigade at the front, has received the Distinguished Service Order.

Charles Thomas, whose four children were left motherless as the result of a street car accident at Winnipeg, is suing the street railway for $25,000.

Bank clearings for the week ending Jan. 18 in principal western cities were as follows: Brandon, $438,098; Edmonton, $2,232,958; Winnipeg, $32,587,679, for the corresponding week last year $32,463,106, and in 1915 $23,810,793; Moose Jaw, $1,080,713; Regina, Sask., $2,551,785.