

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—J. C.—I intend sowing 20 acres of beans and there are 15 acres of the land that were in beans last year and I want to fertilize it with something that will be good for beans. It is heavy clay and the grub worked in it some last year. What would be a good thing to exterminate them? What is the best variety of beans?

Answer—This ground should have been plowed at a medium depth this spring. For beans, apply 400 to 600 lbs. per acre of a fertilizer carrying 1 to 2% ammonia, 8 to 10% phosphoric acid and 1% potash. This fertilizer should be worked in in the course of preparation of the soil; that is, it should be evenly distributed on top of the plowed land and worked into the seed-bed as the land is disked and harrowed. The tillage of the soil will to a large extent exterminate the white grub, and the addition of fertilizer will make the seed-bed all the more distasteful to this insect, as well as strengthen the growing crop against the attacks of the white grub.

As to the best variety of beans, it is impossible to make recommendations. There are numerous varieties of two large classes; first, the bush beans; second, navy beans. Catalogs of any of the reputable seed houses recommend best varieties to grow.

Question—R. G. K.—What kind of soil is suitable for asparagus? Is it a profitable crop?

Answer—Any soil that is well drained and is sufficiently open in texture to allow the air to circulate within it, is suitable for the growing of asparagus. Speaking generally, asparagus does best on a sandy loam soil that has been deeply worked and carefully manured and fertilized. The asparagus crop does not begin to bear heavily until the second year. The crop is grown from seed, and the seedlings are set out into the permanent rows late in spring or early in summer. The following spring they begin to bear. A well-prepared asparagus bed will bear abundantly for 20 years, and when in its best bearing season, the crop may be cut twice a week.

Asparagus yields and quality are

greatly improved by top-dressing the asparagus beds with 1000 to 1500 lbs. of a high-grade fertilizer in the spring, just before cultivation begins. The ammonia, 8% phosphoric acid, and 3 to 4% potash. In cultivation, the soil should be worked deep, but far enough from the plants to avoid injuring them.

Question—D. A.—I want to improve an old cut-over pasture that gets dry every summer. The field is very hilly, soil sandy, has never been farmed, think it will grow alfalfa. I planned to plant corn, a short variety, there any alfalfa at last cultivation. Is there any drought resisting grass you could suggest? Will a green alfalfa bluet cattle? Is alfalfa good for cattle? Will above plan work?

Answer—Believe your plan to get this land into alfalfa is good. I would not choose corn as a nurse crop. Barley is preferable. Sow about one bushel of barley to the acre and seed with 15 to 20 lbs. of good alfalfa seed per acre. In preparing the ground, after it is plowed give it a dressing of about 5 loads of manure to the acre. At the same time spread about 1,000 lbs. of limestone per acre and work these thoroughly into the soil. When seeding the alfalfa add about 300 lbs. of a fertilizer carrying 2 to 3% ammonia, 6 to 8% phosphoric acid and 1 to 2% potash. Harrow it well into the soil. This available plant-food will help the young alfalfa just like whole milk helps the young calf. If the alfalfa gets a good start it is about as good a drought resister as you can get. It is excellent stock feed but I fear if you pasture it with heavy stock there will be a danger of their tramping it out. Alfalfa does not bluet cattle after the dew is off it. Do not allow stock to pasture on it while it is wet with dew.

Question—L. C. P.—What is your opinion in regard to the value of ever-bearing strawberries?

Answer—Ever-bearing strawberries are a novelty in much the same sense that Seven Headed Wheat is a novelty. They do not appear to have any great commercial value.

HOW TO CARE FOR THE DAIRY COW

Of All Farm Animals the Good Dairy Cow Yields the Greatest Profit.

It has been clearly demonstrated that the good dairy cow is a more economical producer than any other farm animal. Not only does she actually yield more product from a given amount of feed but she does this at the least cost and greatest profit.

Notwithstanding these facts the production of milk and fat from the average cow is exceedingly low, being approximately 3,800 pounds milk and 130 pounds fat per annum, which in value is less than the total cost of production. Nevertheless it has been clearly demonstrated that by better feeding and management this average may be easily increased from 30 to 80 per cent; with an increased cost in feed and labour of only 10 to 20 per cent; the margin would be largely profit. Such an increase is not only a financial necessity, but the patriotic duty of every dairy farmer.

Feeding the Dairy Cow
The milk produced by a dairy cow of proper type is in proportion to feeds consumed plus the reserve of feed stored in the body as fat and flesh. As an example of the latter it has been shown that fresh cows may be fed on a maintenance ration or even starved for several days, yet produce milk in fairly large quantities with, however, a proportional decrease of weight and flesh. Again it has been proven that cows of proper type having a store of flesh before calving will not only milk more heavily but also more persistently during the succeeding milking period. It is clear, therefore, that this dry cow of dairy type will be drawn upon as milk or to take the place of feeds consumed in supplying bodily needs that a larger proportion of these feeds may be utilized for milk production.

The dry cow receives little attention from the majority of dairy farmers. The thin cow at calving is in poor condition to make milk profitably and cannot produce the rugged healthy calf fitted to withstand the many calf ailments. Allow the cow four to ten weeks before freshening. A pound of worth as much as two or three pounds of meat fed after the cow has freshened. On poor pasture, feed the dry cow green feed, silage or roots and a grain ration composed of two parts of any two of the following meals: bran, ground oats, ground corn, ground barley, plus one part ground oil cake. The thin cow feed 4 or 7 pounds of cake; if the cow is in good flesh, give roughage as needed and 1 to 2 pounds daily of the above-mentioned grain mixture; if the cow is fat withhold the grain, but on the other hand do not sacrifice flesh or lose a thrifty condition.

Feeding at Calving
Feeding the cow at calving requires special care, varying with the individuality of the animal. Be sure that the condition of the bowels is normal. Constipation at this time is apt to induce many troubles such as milk fever, caked udder, etc. After calving give a tepid drink containing a handful of linseed oil meal per pall of water, allow to rest quietly for twelve hours, after which give a warm bran mash, with two bran mashes on the second day after calving. Feed a limited supply—6 to 8 pounds—of clean preferably clover. Draw a little milk three or four times daily for the first three days; do not milk until after the third day, as such a procedure frequently brings on milk fever. On the fourth day start the dry meal ration consisting of 4 pounds equal parts bran and ground oats. Increase the quantity of grain and strength of the grain mixture to a full grain ration on or about the sixteenth day after calving.

Feeding the Fresh Cow
The feeds consumed by a dairy cow in milk are utilized for two purposes, viz., the manufacture of milk and the maintenance of the body. The cow weighing 1,000 pounds requires the equivalent of 10 pounds clover hay and 10 pounds oat straw or 35 to 40 pounds of mixed pasture grass for maintenance alone. To this must be added the feed to supply energy necessary to manufacture milk. Hence it is evident that the meagre feeding of cows

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 answer 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, 233 Woodbine Ave., Toronto.

Preparedness And The Family Sewing.

"You always get such a lot of sewing done when Miss Smith comes to your house. Last year she made twice as many dresses for you in the same length of time as she did for me. How do you do it?"

That is what folks ask my neighbor across the road. Yet the sewing girl likes to sew at Mrs. Neighbor's. She never hints at being over-worked, and she receives no more wages. Do you want to know the secret?
The time is coming, in some localities it is on the way, when our girls from the domestic science classes of our up-to-date schools will do their own sewing. They will do it well and happily with never a sigh for help from the dressmaker who goes by the day. But many of us, of an older and less well-rounded education, find it necessary to hire the sewing girl once or twice each year. For such housewives, as well as for the woman who must sandwich the sewing in between her housework, Mrs. Neighbor's secret may prove useful.

The secret is just "preparedness." Mrs. Neighbor gets ready for her sewing week just as she gets ready for fruit canning time or washday. This means that she gathers together some equipment which costs very little but which keeps her from wasting time after the sewing is under way.

If she had a room to spare she would make it a sewing-room and keep it sacred to sewing. (But lacking this she turns a bedroom into a sewing-room for sewing week.) Here the sewing is done without the necessity of clearing up and folding away the work before it is completed. Here she moves the sewing machine and cleans and oils it thoroughly, trying it out on a scrap of the material which is to be sewed first, and adjusting the stitch and tension. The machine should stand out from the window so that the operator can sit with her back to a good light.

The sewing room has a trunk or old bureau which holds all the material, linings, hooks and eyes, buttons, etc. Patterns are all in a bag which is hung in an accessible corner. Fashion papers are looked over and plans made beforehand as far as possible.

The thread is kept on a home-made spool-holder which sits within the reach of the sewing-machine. This spool-holder is a small smooth board with brads driven through it and extending out one and one-half inches. The spools are set over the brads so that thread can be drawn without removing them.

There is a scrap bag or big waste basket near the machine or the table. A work table is another necessity. This should not be the dining-table because it will cause too much delay to clear it three times a day. The ironing-board will do for cutting table, but is rather narrow when cutting clothes for grown-ups. A regular folding sewing-table is not expensive and will pay for itself many times, as will a sleeve board for use in pressing the new work. A big old mirror is a useful thing to have in making fittings.

Then plenty of pins, needles, basting thread, a bit of chalk and a soft pencil or charcoal stick for marking through the perforations of patterns, a sharp knife for ripping, and a tape measure may be arranged in one drawer of the machine.

Clothes that are to be made over are ripped, cleaned and pressed before the seamstress arrives. The dress-maker's iron is made last, so that its planning can be talked over while fingers are busy with other work that requires no discussion.

Our neighbor across the road works with the sewing girl. She bastes and does hand work, sews on hooks and eyes, draws the bastings, even cuts out after the pattern has been pinned to the goods. In fact, she gives her whole time to the sewing while the girl is in the house.

For this reason the meals are arranged before hand as far as possible. Baked beans and brown bread, a dinner of corned beef and cabbage boiled together with other vegetables, all started at breakfast time, or slices of roast meat or chicken warmed over in its own gravy are quickly served on sewing days. For desserts there are any kind of pie which is good cold, or canned fruit and cake, or short-cake made of stale sponge cake moistened with a fruit sauce and served with cream.

At Mrs. Neighbor's the sewing girl simply takes off her hat, puts on her apron, and sets to work. Preparedness, Hail!

The Telegrapher.

As I was sitting in the wood
With violets in my lap,
Behold I heard a telegraph
Near by, it went tap-tap-tap.
O'er bushes and briars and bubbling brook
I followed up the sound,
And lo! upon a hollow tree
The telegrapher found.

A woodpecker in scarlet cap,
And black and white surcoat,
A sentence to a grub beneath
The bark was tapping out.
He does not need an instrument
His messages to flash,
For he's the first inventor of
The code of dot and dash.

—Minna Irving.
Shade, shelter and water are needed for every flock in pasture.

"Northland"—1. To brighten the dreary aspect of a northeast bedroom, place a rug of deep raspberry pink (a Scotch wool square is a good choice), with curtains, cushions, etc., of pink and cream chintz, and have the woodwork painted ivory white. You will have a cheerful room, I assure you. 2. To brighten a shabby carpet, sweep the carpet carefully to remove all the dust, then go over it with a clean house flannel dipped in a pall of warm water, to which a cupful of strong vinegar has been added. The flannel should be wrung as dry as possible before it is applied to the carpet, in the process. Let the carpet dry thoroughly before walking on it. 3. A cork pressed under the edges cut off even with the thimble will make a protector for the end of a steel crochet hook. 4. Buttonholes can be strengthened by running two rows of stitching around the edges.

H.S.W.—1. The origin of the expression, "Getting down to brass tacks," has been explained in various ways. Probably it is derived from the custom of marking yards, feet and fractions of a yard on the edge of the tacker in dry goods stores with brass tacks or "brass nails." When the action has "got down to brass tacks," the expression therefore would seem to mean greater accuracy. 2. To clean some clean fine sand or coarsely ground corn-meal in a tub as you can bear your hand in it. Rub it well into the soiled places, then shake it out, and beat and brush the furs till clean.

"High School Girl"—The countries at war are Germany, Austria-Hungary, Turkey and Bulgaria, opposed to Russia, France, Great Britain, United States, Italy, Japan, Serbia, Belgium, Montenegro, San Marino, Portugal, Rumania and Cuba. Panama, China, Brazil, Bolivia, Guatemala, Honduras, Liberia and Nicaragua have broken relations with Germany.

E. K. M.—1. The best book I know of is the "Canadian Soldiers' Manual for French and German." The price is 25 cents, and it is 5 1/2 by 3 1/2 inches. Another good book is "French Self Taught," also 25 cents, size 5 1/2 x 2 1/2 inches. 2. Chocolate is a very suitable article of food to send to your soldier in a concentrated form, fat, protein and carbohydrate being present, with very little water.

"Subscriber"—1. Joppa is a seaport on the west coast of Palestine, about forty miles northwest of Jerusalem. 2. Trieste is an important Austrian port on the Adriatic Sea. 3. The area of the German Empire in Europe is 208,780 square miles; in addition, before the war, there were colonies with an approximate area of 1,028,000 square miles.

something funny, but all she did was to nibble at the grass. Pretty soon this went down to Caro's paper: "Cows eat all the time and never stop. They have big eyes that stare at you, and they have horns to let down the bars with when they go home at night. Our cow is red-dish, and isn't funny at all." Just then the cow walked off under a tree, and lay down chewing her cud. They do their eating first, and then they go and chew and chew and chew!" So she wrote down her discovery, adding, "I wish I could do that way, but mother makes me chew as I go along."

A railway passed near the farm, and just then a whistle sounded shrilly not far away. It frightened the cow, and getting on her feet in a hurry, she came bounding in Caro's direction at a lively pace. "Oh!" screamed Caro, and dropping paper and pencil, she scampered away toward the fence. Safely on the other side, she ventured to look back. The cow was inspecting the composition. "Oh!" cried Caro again, and then louder, "Oh, my!" for the paper had vanished in her mouth!

Caro went sadly home, to rewrite her composition in a safe place, and she added this to her first part: "Cows like compositions, for ours ate mine up."

The next Friday afternoon, when all the twenty compositions were read, the scholars voted Caro Clyde's the very funniest one there.

Hogs
The percentage of tubercular hogs killed in the large packing houses has doubled in the last ten years, due no doubt, to the fact that a concerted effort to control the disease has not been made. Hogs become infected by following tubercular cattle, or when fed unsterilized skim-milk or butter-milk from creameries. One tubercular herd of cows in a community supplying milk to a creamery, may infect all the herds of hogs fed on the by-products of the creamery.

Hogs do not usually contract the disease from other tubercular hogs, hence the problem of eradicating the disease in hogs is largely a matter of avoiding unsterilized by-products from creameries, feeding skim-milk from a tubercular herd, allowing the hogs to follow tubercular cattle, or the feeding of uncooked garbage unless it is positively from a safe source.

the hollowed vault, a niche in the side of which had held the sacred body. The description is forcibly argued (by Latham, in The Risen Master) to imply a collapse as the body within them dematerialized. That the "body of his glory" was not simply the "body of his humanity" (Phil. 2, 21) re-suscitated, is shown by the different guises in which he comes, and his entire independence of material conditions, suddenly appearing and vanishing again. What was mortal was swallowed up of Life: father and son were real (Luke 24, 39), but not of this order. Paul is building entirely on the facts of the Lord's resurrection when he argues so earnestly the utter difference of the "spiritual body" from that we know.

7. Rolled up, on the above theory, means fallen flat and evenly; the head it covered has not been withdrawn or moved aside, but vanished "into thin air."
8. Saw, and believed—So even he did not attain the special blessing of Verse 29. But he believed after seeing much less than others.
9. The scriptures—Acts 2, 24f, shows us which was in thought, and also interprets the must. The great argument of Jesus in Mark 12, 26, which had held back his young friend, objects of God's love should pass into nothingness, is the basis of the ven-

Poultry

A bit of powdered charcoal beats most of the so-called bowel remedies that are on the market.

Lice, heat and too much food make the June chick's life a short and painful experience.

Feeding milk a long time in the same dish without washing it, is the cause of a great deal of bowel trouble in the little chicks.

Sometimes it is not the hen which needs doping half so much as it is the master, and what he needs is a good measure of interest in his business.

When you "don't understand what is the matter" with the chicks, just try changing their runs. Many times the very earth where they are is foul and full of disease germs.

A dead crow hung up by the heels

Horse Sense

Sometimes a horse gets his foot over the tie rope in the stable; does it several times, and you fear he will get into trouble. Just put him in a box stall for a few months and he will forget the trick.

For the average 1,500-pound horse at hard steady work a ration of 20 pounds oats and 15 pounds good hay produces about 11,000 units of power, which is about the work such a horse is capable of performing.

A careful daily washing of shoulders and withers with cold water or, better, cold salt water, will cleanse and toughen the skin of the horse. This washing should be continued from two to four weeks, depending on the age of the horse and the condition of the shoulders.

The orientals have this saying: "One should be slow to buy a chestnut horse, and still slower to sell one that has proved to be a good one." Apply this to horses of every color and we have one of the safest rules ever thought out.

Good butter makes the storekeeper your best friend. With June pasture there is every possibility of turning out an attractive product.

Every year the farmer wonders how the pasture is going to hold out. It is a pretty safe guess that it will fall off about August. Be ready for it. Don't overload the pastures.

Do not try to speed up the separator by guess. Men have thought before now that they could do that, but a speed indicator showed that they were not within forty rows of apple trees of being right.

The Dairy

Unless every cross in breeding stands for improvement in the herd, it shows that there is something wrong.

A cow with the ability to make good records is hindered in production if handled by an ignorant herdsman. We want thoroughbred dairymen as well as highly-bred cows.

Salt, shade and water are essential to the development of a dairy herd. Stagnant water is unfit for the stock. Drain the marshes and ponds or fence the cattle away from them.

The Sunday School

INTERNATIONAL LESSON
JUNE 17.

Lesson XII—The Risen Lord—John 20, 1-18. Golden Text
1 Cor. 15, 20.

Verse 1. Combining this narrative with those of Mark and Luke, we may perhaps infer that Mary of Magdala came alone before it was light, and was joined by "the other Mary" and Salome and Joanna when the sun had just risen. In how much of the story of this chapter she was the leader of a group and in how much she was alone, we have not materials for deciding. Note that all three Synoptists name her first. Taken away—Luke's "rolled away" pictures the manner: it was a very large wheel-shaped stone that moved in a groove. Matt. 27, 66 tells us it was sealed, to guard

against its being secretly pushed aside and replaced.
2. They—The form of the phrase does not imply that she has any people in her mind. It is the Aramaic idiom literally rendered, and would answer to, "The Lord has been taken away." We know not—So the other women are implied already.
3. The details of the visit of Peter and John (verses 3-10) are peculiar to John's Gospel. Luke mentions the visit of Peter only (Luke 24, 12); but here we have the whole scene pictured with all the vividness and exactness of one who stated what he himself saw and took part in (The Handy Commentary).

4. The other disciple was still a boy. Peter perhaps a man in his thirties.
5. Stooping and looking in—One word in the Greek: Peter uses it (1 Peter 1, 12) of angels stooping to look into the blessings of redemption, by wonder, not unaccompanied, perhaps, by fear, at what he sees; and waits for his friend and companion (The Handy Commentary).

6. Peter, with characteristic impulsiveness, unrestrained by the awe which had held back his young friend, stoops to the low doorway and enters

the hollowed vault, a niche in the side of which had held the sacred body. The description is forcibly argued (by Latham, in The Risen Master) to imply a collapse as the body within them dematerialized. That the "body of his glory" was not simply the "body of his humanity" (Phil. 2, 21) re-suscitated, is shown by the different guises in which he comes, and his entire independence of material conditions, suddenly appearing and vanishing again. What was mortal was swallowed up of Life: father and son were real (Luke 24, 39), but not of this order. Paul is building entirely on the facts of the Lord's resurrection when he argues so earnestly the utter difference of the "spiritual body" from that we know.
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