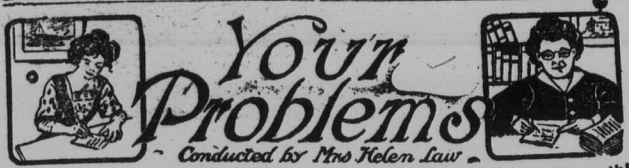


30 Aug. 19



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 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, 233 Woodbine Ave., Toronto.

Mrs. J.L.T.—1. The cause of your five-months-old baby crying so much at night may be:—1. He is not awakened every three hours for food throughout the day. 2. The room is too warm. 3. He is too warmly clad, or the clothes may be wrinkled. 4. He sleeps in a lighted room. 5. He has been accustomed to being picked up every time he cries. 6. He may be constipated. 7. His ear may ache or his throat may be sore. 8. He may have had too much excitement just before going to bed. 2. It is never safe to use old rubbers saved from the year before on a new lot of preserves. To test rubbers for preserve jars, pull them out to see whether they are of sufficient elasticity to return to shape and not break. All parts should be subjected to the strain. Expense should not be spared in buying rubbers. 3. To cure a child of sucking his thumb, swab the tip end of the thumb with tincture of aloes or with a saturated solution of quinine. 4. Lemon is a splendid thing to keep on your sink to rub on your hands after you are through with the dishes. It takes away the stains, freshens your hands and makes them sweet and clean. 5. Hemstitching can be very neatly done on the sewing machine in this way: Draw the number of threads desired and baste the edge of the hem in the center of the drawn threads. Lengthen the stitch on the machine and stitch on the very edge of the hem. Pull the bastings out and pull the edge of the hem to the bottom of the drawn threads. Hemstitching done this way can scarcely be distinguished from that done by hand. 6. A little baking soda sprinkled over fruit when stewing will prevent the juice boiling over. It will also reduce the quantity of sugar required. 7. Apply salts of lemon to the ink spots on the pink cotton dress. 8. To get rid of beetles, sprinkle equal parts of red lead, sugar and flour, mixed, near the holes.

Lulu.—1. To make a fountain that will delight the convalescent child you should get a small glass bottle and nearly fill it with water. Then bore a hole through the cork and place a

straw through the hole. The straw should be long enough to reach almost to the bottom of the bottle, and if the straw does not fit the cork tightly you should put sealing-wax round it to keep out all air. You should now take a glass jam jar and heat it over a lamp or candle. Stand the bottle of water on two or three sheets of damp blotting paper laid on a plate or dish, place the jar over the bottle, and press hard to prevent air getting underneath. Now, as soon as the air in the jar begins to cool, the water in the bottle will rise through the straw and form a pretty little fountain. To great thing to remember is to press the jar down ever so tightly. If air can get away from under the jar you will not have your fountain. 2. The coats of tailored suits will probably be longer during the coming winter than they have for some time. 3. Grass stains can be removed with ether. Most medicine stains can be dissolved by alcohol. 4. Keep only a tea or coffee service with a pair of candlesticks on the sideboard. Lacking the service or a handsome tray, have a good-looking receptacle for fruit. Keep all small silver necessary to everyday use out of sight. The aim is to keep all dignified and free from a cluttered-up mixture. For the dining-room table use a runner or square of crash hem-stitched with a bit of cross stitch or a round centerpiece of oyster-white linen with a heavy fillet insertion and edge.

E.F.—A canning outfit may be made in five minutes. All you need: A wash boiler, a false bottom for it, made of laths or sticks, or of corrugated tin with holes punched in it; a square of cheesecloth to hold fruits or vegetables when dipping into hot water; a kettle. Principles of home canning fruits and vegetables: Wash and cleanse the food; blanch by placing it in boiling water; plunge immediately and momentarily into cold water; pack food in hot jars, add boiling syrup or boiling water; place rubbers and tops in position half airtight; submerge jars in boiling water in the wash boiler and cook; tighten the tops.



Lesson X. The Shepherd of Captive Israel.—Ezek. 34. Golden Text.—Psa. 23, 1.

Verses 11-16. Jehovah himself will undertake the care of the neglected sheep. Search . . . feed . . . bring . . . Successive stages in Jehovah's work for his people: (1) he will seek them out; not one will be overlooked (verse 11); (2) having found them, he will deliver them from the countries to which they were scattered (verse 12); (3) then he will bring them back to their old home (verse 13), where (4) he will feed them with rich pasture (verses 14, 15). Lost—Jehovah, as the good shepherd, will give first care to the most needy. Each will receive what he needs most. Eat . . . destroy—The sheep who have grown fat through taking advantage of their fellow sheep he will destroy. Justice—Better judgment. Instead of feeding them on rich pasture, he will feed them on destructive judgments. 17-22. Jehovah will do even more: the strong sheep will no longer be permitted to injure the weak. 23, 24. Jehovah will appoint a vice-regent to administer the government



From England, as well as from this continent, come reports of dairy herds being reduced. When other men are going out of a staple line is usually a good time for wise men to stay in it.

Insure fancy prices for butter by having a clean, attractive package of good quality. A neat wrapper more than pays for itself.

Cutting dock, mullein, thistles and poisonous weeds in the cattle pasture is a chore that fits in nicely after a rain, when the ground is wet. The task may not seem necessary until a cow is lost through poisoning, when it will be too late for prevention.

Crossing a heavy milk producer of one breed and a high butterfat producer of another in an attempt to combine the two characters in the offspring, is like trying to produce milk custard by grafting milkweed on eggplant.

The profitable gains on a bunch of feeders are those which increase the value of the animals per pound. Such gains are due more to intelligent buying than to feeding and handling.

Shavings are cheaper than straw for bedding, and just as convenient to use. This does not justify burning straw and buying shavings.

A thermometer for the dairy is just as essential as a toothbrush for the Success in handling dairy

products is due largely to maintaining definite temperatures, and such is not possible by guess.

Almost any pure-bred bull with good milking ancestry will improve a herd of grade or scrub cows. That does not infer that the best bull is not desirable.

Value of Bees on Farms.

To give an idea of the value of bees in agriculture, it is stated by a German writer that an ordinary colony during Summer contains an average of 20,000 foragers. Of these 80 fly from the hive to the pasture every minute; therefore, taking the working hours as from 7 o'clock in the morning to 5 in the afternoon, 48,000 flights would be made. During each flight every bee visits at least 50 blossoms. This amounts in round numbers to 2,400,000 for the hive in one day. It is reckoned that there are on an average 100 fine days when bees are able to fly, consequently 240,000,000 blossoms may be fertilized by the bees of one colony. When only one-tenth of these blossoms are properly fertilized by bees, it leaves the enormous number of 20,000,000 fertilizations to each colony.

It is not best to treat grain with formaldehyde if it is to be fed, but in case seed grain is left it may be fed with safety a few days after treatment, as the formaldehyde evaporates quickly.



The Fairy of the Fountain.

The Fairy of the Fountain and the Little Boy of the Fountain are not the same. The Little Boy of the Fountain is a small image who sits by the waters, day in and day out, with up-lifted finger, beckoning the birds to drink or bathe in the basin that he holds in his lap.

And how many, many birds come at his mute call! Freda could tell you, for she is always watching for such things. But how the fairy got there, or where she really came from, Freda never knew.

According to the little girl herself, it all happened in this way: As she was sitting one morning by the fountain, feeding the goldfish, she fell to wondering what it was that made the water bubble up in the basin in such a queer way. Of course grandmother could explain it all; but then that would stop the wondering, which in itself was such fun! Suddenly a wild canary flew toward her, and perched on the finger of the Little Boy of the Fountain; but the strangest thing was that, instead of singing Freda a song, it began to speak to her!

"Little girl," it said, "shut your eyes for just a moment."

Freda did so, and when she opened them again, behold, standing right on the edge of the basin, was the tiniest and loveliest little figure that you can imagine!

"I am the Fairy of the Fountain," the little creature said at once. "You were wondering what made the water bubble up in such a funny way. It is I who make it do that, with my little golden churn. If you don't believe me, just notice how still the water is now, while I am talking to you!" And sure enough, the rippling sound had quite ceased.

At first Freda felt very shy in the presence of so strange a visitor, but at last she found her voice and asked the fairy a question.

"Will you let me play some day with your little golden churn?"

"I wish I could," said the fairy good-naturedly, "but you would never be able to get down through such a tiny little hole. Still, you may try it if you wish."

But Freda could only succeed in getting the end of one finger down the water pipe.

"Can't you bring your churn up here?" she asked, as she shook the water from her finger.

The fairy shook her head. "I should be afraid of losing it, and then all my fun would be spoiled forever and ever and ever."

"I'm sure that if you did lose it my grandmother would let me get you another one," argued Freda.

But the fairy remained firm. "There isn't another one like it to be found outside of fairyland," she said, "and they are scarce enough there."

"How big is it?" asked Freda. "And is it all bright and shining?"

"It's bigger than a thimble," said the fairy, "and brighter than any star."

"Oh, how I wish I could see it!" exclaimed Freda, clasping her hands.

"Well," said the fairy, relenting, "I'll bring it just for a moment to the top of the basin if, as soon as you have seen it, you will shut your eyes again while you count ten."

Freda promised, and before she could have believed it possible, the fairy drew to the top of the water pipe the most wonderful little churn—just a little bigger than a thimble and brighter than any star. "Now close your eyes," she said to Freda.

Freda did as she had promised; and when she opened her eyes once more there was no fairy anywhere to be

seen—only a wee yellow bird perched on the finger of the Little Boy of the Fountain. The bird trilled forth a sweet note or two and then disappeared. And almost immediately the water began to ripple again in the basin where the goldfish were at play.

So Freda will tell you that now she knows just how it happens that the water comes bubbling up: that it is a little fairy churning away at a golden churn. If anyone tells Freda that she must have been asleep and dreaming, she answers that if she had been asleep she would surely have fallen into the fountain and got most dreadfully wet.

Summer Cultivation of Old Meadows.

Two years, on the average farm, is quite long enough to leave meadows down, for best results and greatest profits. They should then be broken up and cultivated for other crops.

Deep ploughing is not necessary nor need the furrows be set up with a narrow plough. Rapid work at this time of year is essential. A two-furrow plough, with three horses, will turn over a large piece of land in a day. At the close of each day the area ploughed that day should be rolled. This breaks the lumps, presses down the furrows, re-establishes connection between the surface soil and the subsoil, bringing up the moisture from the latter to aid in rotting the sod.

After rolling, disking and harrowing should not be delayed. With such cultivation one retains a surface mulch, opens, aerates and fines the soil and destroys many bad types of noxious weeds and with the co-operation of the summer sun this work is most effective. With the present scarcity of labor, this is the cheapest and most practicable method of weed destruction and soil preparation for grain or even for food crops.

After the sod is decayed, a rigid spring-tooth cultivator with wide points should be kept going, at intervals until autumn. Then the land should be thoroughly ploughed, as deep as the humus or plant food in the soil will allow. On the Dominion Illustration Stations, some results have been obtained in comparing the summer cultivation of sod land with fall ploughing the same, which indicate very clearly the benefit derived from summer cultivation as outlined above. In addition to the greater yield obtained, it should be remembered that the land is thereby put into much cleaner condition for subsequent crops.

Two fields of 4 acres each were taken; the first field was ploughed after harvest, was cultivated occasionally during the summer and autumn and ploughed in the autumn; the other field of 4 acres was left in sod and also ploughed in the autumn. The oats from the summer-cultivated field gave a yield of 15 bushels more per acre than the field ploughed in the autumn. This difference of 60 bushels on the four-acre field at 50 cents a bushel shows a total gain of \$30.00. Counting the cost of summer cultivating at \$4.00 per acre, a total cost of \$16.00 for the 4 acres, an increase in net profit of \$14.00 or \$3.50 per acre was obtained. The soil on the cultivated field being in a much finer condition and almost free from weeds, the difference in the profits from the two fields, if worked alike, should be almost as great the following season.

Roots—28 rows of sugar beets grown on summer-cultivated land produced 10½ tons, while 36 rows of the same length grown on land simply spring ploughed only produced 9 tons, a difference of 3,733 pounds. The price paid at the factory being \$5.63 per ton, a gain of \$16.03 per acre was shown in favor of the after-harvest cultivation.—Experimental Farms Note.

Fruit juices and stewed fruits are safest for small children.

FACTORS IN SHEEP RAISING

By I. J. Mathews.

It has been quite a long time since farmers have taken any great interest in sheep, and for this reason the oncoming generation knows very little about the particular points of care that are necessary to make the sheep business a paying one.

Desirable as Scavengers.

As scavengers, sheep are certainly good and for this reason alone a dozen or fifteen head of sheep might well be carried on a farm of ordinary size—say one that contains a hundred and twenty acres. Cattle in the pasture refuse to eat the weeds along the fences and here is a place where sheep come in handy, since they seem to relish the weeds almost as much as the grass. Many farmers have found to their everlasting pleasure that a few sheep turned into a corn field that is weedy will soon rid the field of the weeds without doing any particular damage to the corn. Of course, if the corn is about ripe, after the sheep have eaten up the ragweeds and other foreign plants in the corn field, they may tackle some of the ears of corn, but they will not do this until after they have exhausted the supply of weeds.

In cleaning up old brush rows or pastures that are intended for breaking, sheep do excellent work since they sprout the stumps so completely that the sprouts are killed out during the first season of pasturage. The following spring this land can be broken very well.

Rotate the Pastures.

Where sheep are kept as one of the

major businesses of the farm, particular attention must be paid to the pasture upon which they graze, since there seem to be a number of internal and external parasites that prey upon the woolly creatures. After sheep have pastured upon one piece of land two seasons it is high time that they were moved to the next pasture.

Another point that often comes up regarding sheep is that of shelter during the winter. When it is taken into consideration that when winter draws on the sheep have all the way from two to five inches of wool covering their backs and when we remember how warm woolen clothing is, we are in a position to know at once that the sheep do not require a very warm shelter. The most successful sheep men with whom I have acquaintance do not give the sheep close shelter at any time of the year, except the ewes, for a few days just at lambing time.

The Dog Menace.

Dogs, no doubt, contribute something to the loss of sheep and whether or not there happens to be a law to that effect I should feel perfectly free to shoot any dog that was nosing about the sheep yards. Until secure protection from dogs can be legislated through, sheep men should take precautions by building high dog-proof fences about the place where the sheep stay nights. Under present conditions, however, there can be no doubt but that it will pay to take on a few sheep, but as with all other ventures, he who makes the venture should know the limitations of his enterprise.



Farm Crop Queries



Henry G. Bell

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.

Question—Subscriber:—What is the value of orchard grass for hay? When and how should it be sown? Does it do better on sandy soil than oats? When and how should it be sown?

Answer:—Orchard grass is a very valuable hay grass if cut at the right time. If it is allowed to come into blossom fully, it tends to become hard and woody, and of course, loses in feeding value. Orchard grass can be sown either for hay or for pasture. In either case from 28 to 30 lbs. of good seed per acre gives good results. Prepare the ground fairly in the spring and seed the grass seed with a nurse crop such as wheat or barley at the rate indicated sowing not more than 1 bushel of wheat or barley per acre. Orchard grass thrives on a variety of soils, but it will not do well on undrained soil. It is very resistant to drought and does better than other grasses in shady places, such as in orchards. In order to assist in getting a good stand, you would do well to give the ground a thorough dressing of manure or add 200 or 250 lbs. of fertilizer to the acre at the time the seed is sown.

Question—H.F.:—I wish to know if I could put my second cutting of clover into my silo. Would it make a better grade of feed than it would to cut it for hay? If it is a good plan to put it into the silo, please give me some instructions as to how I should handle it.

Answer:—Some farmers claim to have successfully ensiled clover of second cutting. My personal experience in handling the second crop of clover in this way has not been very favorable. The ensilage which resulted did not seem to be readily eaten by the stock. In my opinion, a better grade of feed from this material can be obtained by making it into hay.

Question—L.C.K.:—We have a piece of land which is pretty wet, but cannot afford to tile it. Would you think it would do any good to sub-soil it? Would it drain any better? It is surface-drained but has not got a good

outlet. Would like your opinion on it anyway.

Answer:—I would advise you to open the surface drains rather than to attempt to sub-soil this piece of land. Sub-soiling may lower the stand of water to some extent, but the advantage would be only temporary. For permanent improvement of the soil, I strongly advise the addition of tile drain as soon as you can afford it. I rather look upon the use of tile drain as a profitable investment which will lead to greater returns from your field than as an immediate expense.

Question—Reader:—I have five acres of very heavy wheat, which is lodged and in a bad condition to cut. I wish to put this ground into alfalfa this fall. I was advised to sow the alfalfa in the wheat this spring, but for reasons unnamed we did not do so. Can I plow this ground after wheat is removed and get the alfalfa in so as to have it get a start for fall? I will very much appreciate any advice as to the proper handling of this problem.

Answer:—In order to get a good stand of alfalfa, I would advise you to cut your wheat, as you have planned. Fall plow the field fairly deeply and top-dress with about a ton of ground limestone per acre. If the soil will not wash or puddle, let it stand till spring. As soon as the soil can be worked add four or five loads of manure per acre, and thoroughly disk the field until it is smooth and mellow. When a good seedbed has been obtained, sow from 20 to 25 lbs. of alfalfa seed per acre at the same time that you drill in about a bushel of barley or wheat per acre. In order to insure a good stand, I would advise you at this time to drill also 200 to 300 lbs. of fertilizer analyzing 2 to 3% ammonia, and 10 to 12% available phosphoric acid. This available plant food will give your young alfalfa plants a quick and vigorous start, and will in nearly all cases, insure a good stand. Cut the barley as soon as it is ripe and give the young alfalfa crop a chance to make a strong growth during the rest of the summer.



Sheep are excellent weed destroyers, as they keep the weeds nibbled so closely that no seeds are formed and the roots are exhausted. A small flock of sheep is an excellent scavenger on almost any farm, and they make profitable use of waste land, provided that dogs and internal parasites can be controlled.

The lambs should have a bit more grain now if they are to be marketed this fall.

Rape is an excellent feed for sheep, and it is greatly relished by them. Experiments have shown that they make rapid gains on it. It is a crop which is easily grown, and where sheep and feeding cattle are kept it will be found advantageous to have a few acres of this succulent feed. As a rule it is pastured off, but it is also a valuable soiling crop for sheep.

When the pastures become a little dry, rape may be cut and drawn to the sheep. A little of it will go a long way in preventing the animals from running down in condition. However, as a rule it is pastured off and proves valuable in keeping the lambs

in condition after being weaned, and in toning up the breeding stock.

There are a few precautions, however, which must be observed in order to avoid loss. It is a feed which readily causes scouring and bloating if care is not exercised at the first. Turn the flock on in the middle of the afternoon the first time or two when the rape is perfectly dry. After a few days sheep may be left on it continually, but there should be grass pasture near the rape field to which the sheep have free access.

Armor For U.S. Fighter.

The armor provided for United States soldiers consists of a steel helmet and steel plates for the protection of the body. From armpits to waist the armor goes clear around the body, barrel-fashion, and is secured by a belt and buckle. It hangs down in front, to cover the abdomen, and also behind. The steel plates are thin, but of such excellent quality as to be fairly proof against rifle bullets or machine-gun fire. They are covered with khaki cloth.

The best way to help others is to help them to help themselves.

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