a Pass.

of shell

Also a

bem may

riends zone.

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.

ural directions.

being grown for silage, it can be can I do for them? nure and fertilizers.

tein instead of buying so much ex- use for fertilizer? pensive feed. Would it be advisable Answer:-In growing onions on little more, if it was not so cold and bother." to sow oats with peas? I have about muck soil the fertilizer that is applied windy," he answered, "but I guess "But what is that arrangement you and the sooner the people of Canada ette:—

in protein. Henry, in his book on onion growers use upwards of 1000 "That cow that is drinking," I point with the chill taken off, in the winter would be enforced in Britain. Al-"Feeds and Feeding", says: "A com- pounds of fertilizer per acre. Many ed to a cow at the trough, "seems to time. So I tried that, too. It was ready the sugar ration is in force. In stews at small cost. bination of peas and oats, if cut early, good yields are obtained where 500 to drink quite a lot, even though it is hard work carrying it from the house; the latest cablegram received at the liteban is disorder. quality, much appreciated by farm However, the largest quantity prostock, especially sheep and dairy cows. duces greatest yields. Similar ferti- have !" he exclaimed. "Now, she helped increase their milk flow, as was pointed out that the supply of can be used in many ways. In the grain which this plant furnishes lizer, applied in equal quantity gives has not drank anything for two days they drank more. So I have installed breadstuffs was causing grave anxiety. Never buy large quantities of spices have a big brother or a cousin going, and the hay which it is possible to best results also on cabbage, when this so I expect that she must be dry, so the heater which you see, to warm the Their bread card machinery had been at a time—they spoil. secure from it, the stockman located crop is produced on muck soils.

W.K.:-What is the best thing to far north, has fair compensation for sidering. grow for silage? Please give cul- the absence of a corn crop." Analyses

ing time in good vigorous condition, knew she'd get over being fussy if I much hard work and much discomfort foodstuffs. The consumption of meat a good sandwich. lem of wintering breeding ewes. This But does she give much milk?" I certainly have, but—the scales within the limits of the available and cakes can be made with bread crumbs, stant appeals to our purse and heart. Shelter, proper feed, and good mancan be done by giving plenty of exwell, she does pretty good 'til winhave shown me that it has paid for greatly depleted stocks. Butter was do to be done by giving plenty of exwell, she does pretty good 'til winhave shown me that it has paid for greatly depleted stocks. Butter was do to be done by giving plenty of ex-

essary, close housing is not advisable, to start with a little dry feed before cows' milk; he might find that they er." especially with the ewes in lamb. the ewes are removed from the pas-Large, dry yards in which the sheep ture. Hay may be used at this time, have plenty of room for exercise are although a feed of half a pound of the first requirement. Seven or eight grain a head daily can be fed more

square feet of floor space in a shed is conveniently. necessary for an average-sized sheep. Rape or rye, sown with small grain The fleece affords sufficient warmth in or drilled in the corn, is excellent for dry weather, and for this reason the fall feed, and is also useful in the main need for a shed or a sheep barn spring. This is an economical feed, is protection from storms. On most and is helpful in keeping the sheep in dry nights the sheep prefer to stay good condition. With plenty of roughout of doors, and will winter better age, such as red clover or alfalfa hay, sheep can be carried until nearly Lesson VII .- Jesus Teaching by Para-While some of the roughage should sping with little grain. Corn silage always be fed out of doors, it is more can be used to furnish succulence, convenient to have the feed racks in- though some losses and a great deal side the barn. With breeding ewes, of trouble have resulted from impro-

good plan to have a pasture on which fore to be avoided. ewes are sold early in the fall, it will be possible to use the winter feed and salt all the time. In feeding and quarters for a larger number of breeding ewes. Sheep will usually three better with not more than 40 sible, but at the same time to keep the same time thrive better with not more than 40 sible, but at the same time to keep ground. them in a thrifty condition.

properly, this moult will not be a complete one, and will be confined to the plete one, and will be confined to the plete one, and will be confined to the plete one, and will be confined to the property of the opportunity they gave us to ready one sees much loose stone.

5. Rocky ground—Not ground should then be washed to remove the go out by herself, with bucket and shovel, to dig in the sand. She would seems to have sent you a present to fields to-day one sees much loose stone. head and neck. It has been my experience that the early hatched chicks—
rience that the early hatched chicks rience that the early natched chicks—rather, thin soil on the surface, with the beef with salt and brown sugar, sidered her—although never would the ter's edge and, before another wave a bed of rock beneath. The grain using about a fifth as much sugar as up to April 15—are the ones that grow a bed of rock beneath. The grain using about a fifth as much sugar as could come in, picked up a beautiful erybody else was wearing Georgette; and have no deep root and no ade-

casing, for our boot or shoe, be it leather, fabric, or rubber, we get it to stick better for service if we make a feather edge about its rim.

This is hard to do with a dull knife, and the usual method is to lay the patch on a piece of soft board, when our knife soon gets dull as we chip the edge away. Our method for thinning down to a feather edge is to whet our knife sharp on a fine-gritted whetstone, then lay our patch flat upon this same stone, and as we work and our knife slips out from the edge of the patch as it is pared off, it becomes sure you have rubber cement for rubber patching. leather cement for heather work, and rock cement for Always leave rubber cement cure in the air just a little longer than your directions and you will have less tiny air bubbles beneath the patch.

Seeking 101 Flux, and mother without fear without fear without fear The balance fair 'twixt Righteousness and overshadowing matters, and overshadowing matters normal and religious. The seed brings nothing to perfection for lack of nourishment, room, and attention. Choke the word—Inevitably, for the heaven!

Nina Moore Jamieson.

Nina Moore Jamieson.

DAIRY COWS NEED WATER

By C. E. R ichardson.

I often wonder if the average farm- also, were not giving as much milk as er realizes how important it is, for they might, if they could have better dairy cows to receive a proper sup- means to procure their water to drink. ply of drinking water each day. When A few weeks later, I called to see one understands that milk is nearly another farmer. This one kept cows two-thirds water, it becomes evident, similar to the farmer described above. then, that cows ought to have plenty I noticed that he had made some of it, ready when they get thirsty. I changes in his tie-up. know of farmers that are extremely "Yes, I have built a place in the careful as to feeding and stabling barn with a trough, so that I can now their stock. They give balanced rations water my stock inside on cold winter

for silage by all means is good field cured fodder corn analyzing 4.5 per- just turning his cows out to water. different water arrangements?"

eight acres of good black loam for should earry from 1 to 2 per cent. they get enough to 'get-by;' any- have there, also? "I asked. ammonia, 8 to 12 per cent. available way, cows don't need as much water "That is another improvement. A ly the British Food Controller made lighters. Answer:—Peas and oats, cut for phosphoric acid and 1 to 3 per cent. in the winter as they do in the sum- dairy expert told me once, that all the the statement that the time was at such as a such a

she has got to drink to-day. Yesterday water here so I do not have to carry it completed but the lack of cereals had Muffins made from left-over boiled have nothing but war, and while to the To bring the breeding ewes to lamb- because it was windy and cold; but I "By building this you have saved was a great shortage of farinaceous Brown bread and baked beans make it's grim enough to me. The boys are

agement are the requisites in bringing ercise and the right kind of feed ter comes and then she drops off." likelf. I would not have believed it very scarce and milk even more diffi-

sendor

INTERNATIONAL LESSON

· FEBRUARY 17.

bles: Four Kinds of Ground-

Mark 4. 1-20. Golden Text,

Luke 8. 18.

leaders in all the ages.

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 ment later she raised her head. Her stamped and addressed envelope is enclosed.

Address all correspondents for this department to Mrs. Helen Law, 235 you that her boy was "over there." Woodbine Ave., Toronto.

Mrs. E. A .: - There are two ways populations of France and England drive and were already making plans and comfortable in the winter. They "Do you find that it pays?" I ask- in which you can preserve your sur- have not tasted flour bread for months for the Red Cross campaign. plus pumpkin. 1. Cut in strips and a Canadian nurse just back from "Last year we wouldn't have vide bedding for them to lie on. But, "I certainly do," he answered. "You dry thoroughly (in the same way as France tells of having visited the thought we could work this way," said they let the cows get what water know I began last fall to weigh my apples) over the cooking stove, then Army Bakery in the Canadian section the younger man. they can, not thinking it worth concows' milk. I found that after I got pack away in an old pillowcase in a tion and seeing thousands of beautiful "No," agreed the older. "But I used to it, that it was not the bother dry place. 2. Cook the pumpkin as loaves being turned out for the certainly couldn't stand it now if I I remember one day last winter, I that I expected it would be. I have if for making pies, pack in sealers, consumption of Jack Canuck. Who-didn't. I've got to have something partly screw on the lids, put them ever else goes short he must not. That all the time to take my mind off it. Answer:—The best thing to grow percent crude protein against field who lived in the next town. He was "Did you find that the cows needed into a wash boiler on top of a wooden is why the people at home are being The more work the better. Nights rack placed on the bottom of the boil- asked to save wheat flour, beef, bacon, when I have time to think the thing The trough was about a hundred feet "I found along the first part of this er, nearly cover with cold water and sugar and other commodities. Dent corn can be successfully grown, J.N.:—When is the proper time to away from the stable. It was a windy winter, when the weather got cold and boil for an hour, then screw the lids away from the stable. It was a windy winter, when the weather got cold and boil for an hour, then screw the lids away from the stable. It was a windy winter, when the weather got cold and boil for an hour, then screw the lids away from the stable. It was a windy winter, when the weather got cold and boil for an hour, then screw the lids away from the stable. In all probability it will out-yield Flint cut scions for grafting? I have a distance and selection of the scions for grafting variety. However, toward the centre case in my plum trees that is rotting cows out one by one, he would drive milk. I was surprised, because I cupboard. Be sure the sealers are vegetables will be prohibited again to give less tightly and put away in your preserve able that the sale of the vegetables will be prohibited again to give less tightly and put away in your preserve able that the sale of the vegetables will be prohibited again to give less tightly and put away in your preserve able that the sale of the vegetables will be prohibited again. The visiting teacher was drying the

and north of Ontario, the Flint variety the frhit, starting before they get ripe, them over to the water with the help have a nice warm barn and try to well sterilized by boiling before they get ripe, them over to the water with the help have a nice warm barn and try to well sterilized by boiling before they get ripe, them over to the water with the help have a nice warm barn and try to well sterilized by boiling before they get ripe, them over to the water with the help have a nice warm barn and try to well sterilized by boiling before they get ripe, them over to the water with the help have a nice warm barn and try to well sterilized by boiling before they get ripe, them over to the water with the help have a nice warm barn and try to well sterilized by boiling before they get ripe, them over to the water with the help have a nice warm barn and try to well sterilized by boiling before they get ripe, them over to the water with the help have a nice warm barn and try to well sterilized by boiling before they get ripe, them over to the water with the help have a nice warm barn and try to well sterilized by boiling before they get ripe, them over to the water with the help have a nice warm barn and try to well sterilized by boiling before they get ripe, the nice warm barn and try to well sterilized by boiling before the next fall in order to encourage the culmatures better than the Dent. Re- and keeps up until all are gone. On of a little stick which he used for a have them comfortable. But I no- pumpkin is put into them. You will tivation of back-yard gardens and va- keeper's husband was too old old to go, member that the best quality silage is the plum trees there is an insect, a whip. When they got there, some ticed that they would not drink some find that the pumpkin is just as good cant lots in spring and summer. The ber children were all girls, and she had made from corn bearing ears which half an inch long, shaped like a fish, would try to drink, but the wind blow- bad days as they ought to, and on for pies as when freshly cooked. As are pretty well mature. If corn is slimy as a fish, eating the leaves. What ing on them kept them busy holding good days they drank more. On for the pickled cucumbers that were their heads so as to protect them- those days they would give more milk. frozen in the vinegar, I fear they are in accomplishing its main purposes, not touch her personally. The teach-Answer:—You will do well to write selves, and the water having ice in it, So I tried an experiment. When the ary field corn. It also will benefit the Horticultural Department of Onmade it impossible for them to drink bad days came again, I carried water heating up some of them with fresh of perishable food but also to save er, brother nor sweetheart. from an additional application of ma- tario Agricultural College, Guelph, as much as they needed, so after in pails to them. They drank all vinegar and spices. Let us know tin-plate, of which there is a shortage. "I feel so depressed," said the

not permitted its application. There rice are delicious. for your cows?" I asked. had been restricted by high prices to Delicious muffins as well as griddle help the family out and there are con-

20. The good ground—It goes al- well advised to save cream as much thing is boiled and stewed in order "Yes, but isn't it gloriously interestmost without saying that when the as possible and make butter. Did that there may be no waste of fat. ing?" came back the saleswoman. "I seed has favoring conditions it gives you know that the Duke and Duchess Grease from the kitchen sink is care- am so thankful I'm alive to see it all, the best results. Each kind of soil of Devonshire have discontinued the fully treasured and soap, the basis of and live it. Nothing else has ever produces according to its capability. use of cream at Rideau Hall for the w'ich is edible fat, has become a been worth the doing-just getting

ditions are just as they are painted war time tips for you, Miss Kitchen- everything. The future is all dark,

realize this the better. Quite recent- Dried potato parings make good fire ed good fortune in our business."

sheep successfully through the winter regularly. When the fall grass I wonder what sort of a surprise he if I had not proved it that way. But, cult to obtain. Oils and fats were good care of every scrap of fat. It is glooms." season. While some shelter is necis soft it is a good plan might get, if he should weigh his after all, 'experience is the best teachpractically unobtainable. Isn't this becoming more precious every day for "It's a hard time to live," moaned might get, if he should weigh his after all, 'experience is the best teachpractically unobtainable. Isn't this becoming more precious every day for "It's a hard time to live," moaned might get, if he should weigh his after all, 'experience is the best teachpractically unobtainable. Mrs. L. A. C .: - Yes, you would be In Germany no food is fried but every- her silk. luxury of the wealthy. Candies, an- through the days some way. But A Soldier's Wife:-You may rest other fat product, have disappeared. now we can see a reason for every-

The Sea Fairy.

the wetner tambs and the cult lambs at their side is oats and brail.

The flock should have access to water the lake in plain view were the fields, which good results in curing pork place in the fall, it will the conditions

fields to-day one sees much loose stone, smoked flavor is desired. A very always first look up and smile at the remember her by." "A palatable mash which should 7. Among thorns—Which absorb days for about two weeks. It should

Two ounces of this mash, with one and forth in his name. Broadly speaking, it needs considerable freshening be- er's eyes so much that she had to wear one-half ounces of cracked corn, and all teachers of spiritual truth. The fore cooking. If the red color of the one-half ounces of cracked corn, and one-half ounce of whole oats should be one-half ounce of whole oats should be men by the Master. Historically, beef is to be preserved, use a small brown glasses; and father only laughmen by the Master. Historicany, amount of saltpeter, not more than the teaching of spiritually-minded two ounces to each hundred pounds of two ounces to each hundred pounce to each hundred pounds of two ounces to each hundred pounds 15. The way side—Representing the the meat. This improves the color of face and her long, sea-green hair, became an important personage.

So when the holidays came, and Lillian joined her family in the South, one of the first things that she wanted was to see the fairy.

"We must wait until to-morrow

a pale shell with seaweed blowing about it, up there, just above that Cunna Shur-Gain

were now coming in with unusual force, way." beating and lashing against the rocks. And so the talk runs, everyone dis-

Madeleine had gone for the winter seaweed. Looking down, she saw without white bread and frosted cakes fishing boat, which is pushed out a form a patriotic service by curing with her father and mother, after they that there were tears in Madeleine's and baked ham, and moan for our boys If the wether lambs and the cull lambs at their side is oats and bran.

An excenent ration for ewes with number of the brine or dry mixtures a boarding school, to a lovely sunny long," she said to herself; and then, hurt the cause. If we choose to feel lambs at their side is oats and bran.

Any of the brine or dry mixtures a boarding school, to a lovely sunny long," she said to herself; and then, hurt the cause. If we choose to feel lambs at their side is oats and bran.

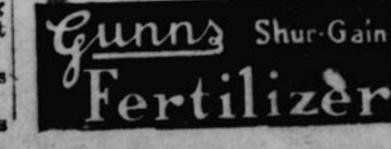
The Persevering Knitter. There is a maid in our town And she is wondrous bright, She's knitted socks and sweaters From morning until night. And when she'd knit the Red Cross of life.

As sure as I'm alive,

He kept just four or five. She washed the wool and carded it. The persevering elf, Ongreat grandmother's spinning wheel ed, will come out of it heavy losers. She spun the yarn herself. She steeped the hulls of butternuts.

And dyed the yarn all tan, And knit another sweater. For another soldier man.

A Song For Twilight.



IS IT HARD OR INTERESTING?

Four boys in khaki swung down the street. It was the day after Christmas. The little woman in the front seat of the street car hid her face in her muff and a sob shook her. A mo-

Two business men were talking. They had just finished the Y. M. C. A.

Farmer:—I have a dairy of thirty ows and would like to raise some that I am going to put half into colors.

The Food Controller's Onice is preparation of the barn, cold and shiver-business and Jack can't pass the exammy favor when I watered them in out that I am going to put half into colors.

The Food Controller's Onice is preparation of the barn, cold and shiver-business and Jack can't pass the exammy favor when I watered them in out that I am going to put half into colors. cows and would like to raise some kind of feed that would be rich in protein instead of buying so much ex-"Well, I suppose they might drink a more than paid for the expense and Europe are at all exaggerated. Con- Miss Kitchenette:—Here are some the bottom is going to drop out of and yet everything points to continu-

"You'd be an unhuman monster if

isn't hard at all if you look at it that

Suddenly Madeleine grasped her sis- cussing the war as it affects them. But ter's hand. "O Lillian," she cried, no one has gotten a better view of it "that last great wave has carried her than the saleswoman. We can make it hard or interesting, just as we Nor could Lillian find any more please. If we please to sit around sign of a white shell with its bunch of and feel sorry because we have to go days to be looked back to with envy

"A palatable mash which should produce winter eggs in a well-bred the nourishment of the soil and thus then be washed wined and hung up produce winter eggs in a well-bred the nourishment of the soil and thus flock of fowls kept in light, roomy and flock of fowls kept in light, roomy and a hundred fold to dry in a warm place or transferred. how bitter you were when your neighbor got a new car and you still had to drive the old buggy. How silly those things seem now beside the real issues

Truly, these are interesting times. And they are times of testing. Those reward in largeness of spirit, while those who can see only the hardships and lose sight of the ends to be attain ---

Saving Burst Cabbage.

I had a fine lot of late cabbage, but nearly all of the heads cracked open so that I couldn't expect it to keep in storage. Since we don't care for kraut, I was puzzled to know how best tars to save it for table use, until my neighbor told me to can it as she used to do years ago.

We cut it fine and cooked it exactly as for the table except that no seasoning but salt was used. When fairly tender it was packed closely in jars and filled to overflowing with the hot juice, then processed and sealed

Fresh cauliflower is creamy white and it feels heavy.

Pastry can be made from cocoanut

if allowed to be there.

'To secure winter eggs it is necessary to breed from winter layers," should be selected now. Just which ones to choose is, of course, the thing that stumps the man who has never given much attention to poultry. a poultryman or farmer can find five or six hens in his flocks that have laid be bred and a small flock of good producers raised for next year, if the

eggs are hatched early. "Early March is the best time to course, much has been said about ear- fed to each hen daily.

flock of fowls kept in light, roomy and sanitary quarters, can be made as follows: One hundred pounds of bran, lows: One hundred pounds of gluten meal, 100 pounds of gluten meal, 100 pounds of gluten meal, 100 pounds.

Madeleine wrote a letter every week reme such to dry in a warm place or transferred to dry in a warm place or transferred to the smoke house and given a light to the smoke house and given a light what to say. And always there was to-day, is of marvelous fertility, and smoke.

That still endure through all the presented by the removed spaces vast,

When we fit a patch for the inner A little child—a smile, a song from spiritually obtuse who indeed hear but the meat but is detrimental in that it Wakening echoes from far ages past enter. Satan—The truth removed

It is not intended to teach that all per- period of the war? these four classes. The point of the assured that the men in khaki are be- France and England also lack fats, al- thing we do. Every move we make, the best results, must have the right ing well fed. Although the civilian though in a lesser degree. of way in the life of a man. The good ground is not only a well-prepared soil, but a soil steadily cultivated and cleared of all noxious elements. When these are the conditions the life is fruitful.

Cure Beef At Home. Verse 1. Again by the sea-sideof injury in their crowding through peculiarly subject to injury from mold-narrow gates. In dry weather it is a ly feed Poorly kept silege is there. narrow gates. In dry weather it is a ly feed. Poorly kept silage is there- the water's edge, the Master in the living expenses, but they can per-

4. The way side—The beaten foot will become hard and salty. path, falling on which and having no Dried beef should have the same covered a fairy. ly-laying pullets moulting in October lodgment in the crevices of the earth, cure as corned beef, but it should not There were no other little girls livand November, but if the birds are fed an easy prey to the birds. See allowed to become too salty. It ing near, and so Madeleine would often the seed fell an easy prey to the birds are fed because of the opportunity they gave

November, December and January—
that is, ten eggs a month—these can

of most scrap 150 pounds of crushed

to-day, is of marvelous fertility, and smoke.

Corned beef is at its very best when some word about the sea fairy.

The sower—Primarily Christ oats and 150 pounds of corn meal. himself, then his apostles, who go If kept in the cure more than a month, but then, the glare always hurt moth-

A Dustless Mop.

Make it yourself. Start with an 16, 17. Rocky places . . . no root old broom. Cut the straw off just in themselves—A superficial reception A child to love, to lift us from the of the truth and a quick lodgment of below the wires which hold it to the it, with a quick germination, but not handle. Cover this with an old stock- "when the sun is bright. She never To curb our faults, our virtues to sufficiently deep to give stability. No ing and sew on to this covering the seems to come out in the afternoondepth of soil, consequently easily legs of other old stockings cut about or if she does I can never find her." and rain, which nourish the seed in inch strips up to two inches of one ing, the big girl and the little girl are still as hadded in To open wide the clutching miser scorched and easily washed away. Sun twelve inches long and slit into one-To show us where fair flowers of Duty nod,

To bid us run, and sing—forget to plod:

The tired birds, their songs all said, morning to the rocks. Madeline point—the surface in rows about one inch apart until the mop is of the desired thickness. Then dip the mop into a solution of one-half cupful of melted solution of one-half c 18, 19. Among thorns . . . cares, paraffin and one cupful of kerosene wind." clear

Seeking for Truth, and holding riches, lusts—Other things go deeper and allow the liquid to dry on the she said. "All I can see. Madeleine, is into the life, absorbing time, attention, strips.

The mop may be kept moist she said. "All I can see. Madeleine, is into the life, absorbing time, attention, strips."

And sings a drowsy lullaby—

Good night, good night, good night!

UNIARIO ARCHIVES TORONTO