

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.

Reader:—1. "Anzac" stands for the initial letters of "Australia (and) New Zealand Army Corps." The name was first coined at the Dardanelles. It has no reference to Canada, for there were no Canadian troops, just the Army Medical Corps, at the Dardanelles. 2. To remove paint from clothing, saturate the spots two or three times with equal parts of ammonia and turpentine, and then wash out in soap suds. 3. Nothing whitens the hands so effectively as rubbing a slice of lemon on them once or twice a day. This is also a good way to remove stains from the fingers.

Worker:—To decorate a table for a Red Cross luncheon, instead of a tablecloth use "runners" of heavy white stuff which can afterward be made into nurses' uniforms. At intervals down the table arrange large crosses of red paper. In between, you might place measuring glasses, filled with red and white flowers. Bonbons may be in the shape of pellets and placed in pill boxes, which mortars might hold salted nuts and olives. Instead of napkins, use squares of cheesecloth, folded bandage fashion; these may be saved, washed and sterilized and used for covers for medicine glasses.

One of the Girls:—For your Halloween party: Begin with the One-Yard Dash. Measure off one yard on the carpet, give each boy a potato, which must be laid on a line. At a given signal each contestant gets down on hands and knees and pushes the potato with his nose until he reaches the other line. There should be a simple little

Bedtime Stories

The Fairy With The Lantern.

The little fairy of whom I am going to tell you was named Jack, and he carried about, through all the long, dark hours, a tiny lantern. During the day he must have slept very soundly, for he was up 'nights until very late, but in such snug places that no mortal could ever discover him. At night, though, it was easy enough to see what he looked like. At least so thought Annabel, who, her grandfather said, had eyes that saw what no others ever could see. She declared that Jack was just about five inches high, that he wore a peaked hat, and that the light of his lantern, as it danced over the big marsh near her grandfather's house, was like the blue flame of a candle.

Grandfather had several times warned the little girl when she came to visit him never to have anything to do with Jack. He said that if Jack was a fairy, as she insisted, he was certainly a very naughty one, who would like nothing better than to have people follow him into marshy lands where they would be sure to be stuck fast in the mud; then he would laugh at their plight, but never offer to help. But Annabel, although she promised that she would never even try to go near the little blue dancing light, insisted that Jack was a good fairy, and some day, she said, they would find out that she was right.

One night, when Annabel was staying at grandfather's, the light blue, indeed, it was soon seen that there were two of them, and then three.

The Sunday School

INTERNATIONAL LESSON

OCTOBER 14.

Lesson II. Returning From Captivity—Ezra 1. 1-11. Golden Text—Psa. 126. 3.

Verses 1-4 contain the proclamation of Cyrus, King of Persia—Cyrus began his career as king of Anshan, a small district of Elam, to the east of Babylonia. Within a relatively short time he conquered the whole of western Asia. One of his most important early conquests was Persia; hence he is generally known as King of Persia. First year—As king of Babylonia; in other words, in B. C. 538 or 537. Jeremiah—The reference is to Jer. 25. 12; where the promise is made that after seventy years the power of Babylon was to be destroyed, which would result in the liberation of the Jews. Since Jeremiah's message is dated about B. C. 604 the later Jews might well see in the return of 537 a fulfillment of Jeremiah's prediction. The primary interest of the author is in the rebuilding of the temple. Jehovah stirred up—It is only natural that a Jewish writer should trace the impulse which prompted the proclamation to divine suggestion. Cyrus himself asserts that his policies of kindness and generosity were inspired by Marduk the god of Babylon. Proclamation—Ezra 6. 3-5 contains a more original form of the decree of Cyrus, Jehovah gave me—There is no indication in any of the inscriptions of Cyrus in any of the inscriptions of Cyrus here may be due to later working over of the decree from the point of view of Jewish religion. There is,

prize for the winner. The Hurdle Race is for both boys and girls. Each person is given six needles and a spool of thread, and the one who first threads them all wins the contest.

Next comes the Standing High Jump. Hang three doughnuts in a doorway, about four inches higher than the mouths of the contestants. Tie their hands behind them and see who first bites a doughnut.

For a Drinking Race each player is given a half glassful of water and a spoon. The water must be consumed a spoonful at a time, and the one who finishes first is the winner. If any is spilled, that contestant is barred out.

The Bun Race is great fun. A clothes-line is stretched across the room, and from it are hung sugar buns at a height just reaching each player's mouth. The players stand in line with hands behind them, and at a given signal begin to eat the buns. The bobbing of the line makes this very difficult.

Last comes the Rainy Day Race. Each contestant is given a shoe-box containing a pair of over-shoes, and tied with string. A closed umbrella is also handed to each. When the starter counts three the boxes must be untied, the over-shoes put on, and the umbrellas opened. The contestants then walk across the room as rapidly as possible to a set line, remove the over-shoes, replace them in the boxes, tie the boxes, and close the umbrellas before they walk to their starting place. The one who arrives there first wins.

"Jack has borrowed another lantern or two," said Annabel. "He does well to make the most of his time," replied grandfather, "for to-morrow men are coming to begin the work of draining the marsh, and that will be the last of Mr. Jack and his lantern."

And, sure enough, the next time that Annabel went to stay with grandfather, and at night looked out of the window, there was no light to be seen flitting about anywhere; for the bog was now hard and dry. "It's just as I told you, Annabel," said grandfather the next morning. "That bad fairy has gone away forever."

Annabel's curls nodded, but her lips added, "Only, grandfather, he was a good fairy. You see, he knew that in the dark people might walk into the bog and get almost drowned. So he came after night to warn them, waving his little lantern to warn them away. I often used to think how sleepy he must have been."

Grandfather smiled. "That's my dear little girl," he said, laying his hand on her curls, "who is going to find all the good she can in everyone, even in a fairy."

But Annabel, her mind still on the fairy, said, "And I'm sure, if you go to another bog, you'll find Jack there with his same little lantern, warning everyone to keep away. Indeed, indeed, grandfather, he was a very good fairy, and I shall always try to remember him."

The number of women acting as substitutes for men in the field in France has passed the 1,000,000 mark.

Build to-day then strong and sure, With a firm and ample base, And ascending and secure Shall to-morrow find its place. —From Longfellow's "The Builders."

however, no good reason for doubting the historicity of a decree issued by Cyrus giving permission to the Jews to return to their old home: (1) Such decree would be in perfect accord with the general policy of Cyrus as reflected in his own inscriptions; (2) the imminence of a conflict with Egypt would make it desirable to have near the borders of Egypt a nation on whose fidelity and gratitude he could rely. Whosoever is left—Without the means of returning to Jerusalem. Gold . . . silver—To purchase food and other necessities during the journey. Goods—Camp baggage, and furniture. Beasts—Animals for carrying the supplies. Freewill—Voluntary gifts of a more private nature, to be used for the rebuilding of the temple.

5-11. Preparations for the return and the return itself. Judah and Benjamin—The author holds the view, found also in other Old Testament passages, that the southern kingdom consisted of two tribes (1 Kings 12. 21, 23); other passages assert that Judah alone constituted the southern kingdom (1 Kings 11. 13, 32, 36). Strengthened—The Babylonians and the Jews who remained behind gladly assisted those who decided to return. Vessels of the house of Jehovah—Compare 2 Kings 24. 13; 25. 14, 15, and 2 Chron. 36. 7. His gods—Better "god." The chief deity of Nebuchadnezzar was Marduk, who had a magnificent temple in Babylon. Sheshbazzar—Both he and Zerubbabel are named as governors of Judah (Ezra 5. 14; Hag. 1. 1, 14; etc.); consequently it has been thought by many that the two names refer to one and the same person. It is more probable, however, that they refer to two distinct persons, Sheshbazzar preceding Zerubbabel as governor of Judah. Platters—Bowls—The meaning of the words is not absolutely certain. Knives—Better, "censers." The total secured by adding the figures in verses 9 and 10 falls far below the total given in verse 11. Captivity—The company of exiles accepting the offer of Cyrus.



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ECONOMIC PRODUCTION OF WHEAT IN RELATION TO FOOD PRODUCTION

By Henry G. Bell, Agronomist.
(Concluded from last week)

The Canadian farmer is a manufacturer, and he is interested in everything that will add to the efficiency of his crops. He finds himself short of sufficient manure to cover all of his wheat areas and the areas of the other important crops, such as corn, potatoes, etc., hence, he supplements the plantfood of the soil and manure by the addition of suitable fertilizers. Probably no phase of wheat-growing has a more important bearing on the economic production of the 1918 crop than proper fertilization.

Now, what are fertilizers? They are carriers of available plantfood; just the same plantfood as is carried in farm manure. Fertilizers are composed of materials gathered from sea and mine and air, as well as from the by-products of various industries. You speak of bread-carrying protein, carbohydrates and ash. Well, fertilizers supply nitrogen, which is the basis of protein, potash, which causes the formation of starch and other carbohydrates, and phosphoric acid, which hastens the growth of the crop. Therefore the fertilizer industry is closely linked with the farmer's important calling in producing the food of the world.

The Value of Fertilizers. Now, does it pay to fertilize wheat? This depends upon four things: (a) The productivity of the soil; (b) The yield of wheat obtained; (c) The price of wheat; (d) The cost of fertilizer.

I have already dealt with the first factor, in last week's instalment of this article. The yield of wheat is directly dependent upon the supply and balance of plantfood. The oldest fertilizer tests in the English-speaking world have been conducted by Rothamsted Experiment Station, England, where, as an average of 51 years, there was obtained an increased yield of 18.1 bushels per acre from fertilized wheat over wheat grown without fertilizer.

At present wheat prices, such increase in yield is full of interest to the farmer. But he asks, can such increase be made economically? Farm labor has increased in cost; seed and fertilizer have likewise increased. A careful study of the situation shows that the advantage is still with the farmer. A very small increase in yield will pay for a liberal application of fertilizers on wheat.

Time will not permit my going into the adaptability of the analyses of fertilizers used by various experiment stations, but a careful charting of the yields of wheat obtained at Ohio shows that acid phosphate can be used at material profit on wheat. It is strongly advised by the experiment station.

A similar study shows that nitrogen and phosphoric acid give material profit at present wheat prices and fertilizer costs. Complete fertilizers, or those carrying potash as well as nitrogen and phosphoric acid, also give a profit at present prices. On sandy soils or on soils containing a high percentage of muck, potash is especially desirable. Fertilizers have an important bearing on the next factor in economic wheat production, which is insect and disease control. The most destructive insect effecting the wheat crop is the Hessian Fly. This insect lays its

eggs on the leaves of the healthy plant. The maggot hatches on the leaf and bores into the stalk. Having damaged the wheat the maggot goes into a dormant state known as the "flaxseed" stage. This flaxseed remains in the stubble, coming out in the fly form early in August. The life of the adult fly is but a few days, probably but a week or less, as a rule a great mass of flies appear about the same time. If the wheat is sown after the flies appear, by the time the wheat is up they are gone and the crop escapes the attacks of this insect. Now, late sown wheat is at a disadvantage, in that it has but a short time to make sufficient growth to withstand the cold weather of autumn and winter. By the addition of 200 to 400 lbs. of fertilizer per acre at the time the wheat is seeded, there is added sufficient available plantfood to enable the crop to make this strong healthy growth.

The wheat crop suffers material losses in some sections from attacks of smut. This is a fungous disease which spreads throughout the growing plant and comes to its fruiting stage about the time the wheat grains are filling. The spikelets of the infested crop, instead of containing well-filled kernels, contain sacks filled with little black seed-like bodies known as spores, which are actually the seeds of this disease. The wheat crop can readily be freed of smut disease by treatment with formalin, as indicated in the publications of nearly all of the agricultural experiment stations.

The profitability of the use of fertilizers in producing more and better wheat is established. It is the logical practice in connection with the use of good seed and proper soil tillage.

Five Important Factors.

The fertilizer industry, like all other industries is encountering enormous difficulties arising from the present war. Its nitrogen carriers are used as a basis of explosives. Potash from Europe, as you know, is now only a memory, and submarine activities have greatly aggravated the shortage of sulphuric acid used in the manufacture of acid phosphate. Nevertheless, the fertilizer industry is vigorously endeavoring to supply the Canadian farmer with as much available plantfood as can be assembled and manufactured, so that he may do his part in overcoming the food shortage.

Let me again emphasize these points to all growers of wheat—points which are established beyond a question by careful experimentation and actual experience—that the largest crops of best quality wheat can be produced by giving careful attention to the following five important factors:

- (1) Thorough drainage of the soil;
- (2) Thorough preparation of the seed-bed;
- (3) Selection of suitable varieties of wheat and good quality seed;
- (4) Adequate fertilization;
- (5) Control of insect pests and diseases.

Attention to these five details will enable Canadian wheat-growers to do still more efficient work in the campaign for increased food crops, and thereby render great service to humanity in this tremendous crisis of the world's history.

The Dairy

A bull is half the herd, if he is a purebred capable of transmitting his good qualities. But if he is a poor sire, he is more than half—he is nearly all of it. At the Ohio station a bull whose dam had a high official record and whose grand-dam had a record of large production, sired daughters which showed an average gain over their dams of 1,902 pounds of milk and sixty pounds of fat the first year. Their average yearly difference was more than 1,100 pounds of milk. Another sire selected from one of the best herds in the state showed a decrease of 687 pounds of milk and thirty-nine pounds of fat. His sire and dam had no official records. Bitterness in cream and milk is a frequent trouble during fall and winter months. If milk is bitter when it is drawn, the trouble is with the cow or her feed. Very often cows give bitter milk toward the close of their lactation period. The old dry weeds of winter pasture also give rise

to a bitter flavor in milk. The remedy in this case is to keep the cow from such pastures.

Scalding Poultry

Dressed poultry for long-distance shipments had best be dry-picked, but for near-by markets or home consumption scalding is perfectly proper. In fact, scalded birds sell best to home trade.

The water must be as near the boiling point as possible, without boiling. Care must be taken in scalding. The legs should first be dry-picked, so that it will not be necessary to immerse them in hot water, which would change their color and cause them to lose their brightness. Neither the head nor the feet should touch water. If the head is allowed to get in hot water it will present a sickly appearance.

The market generally accepts fowls that are either scalded or dry-picked, with the exception of broilers; with the latter, dry-picking alone is allowable. Scalding also increases the tendency to decay. It is claimed that scalded fat fowls do not cook so well as dry-picked.

GOOD HEALTH QUESTION BOX

By John B. Huber, M.A., M.D.

Dr. Huber will answer all signed letters pertaining to Health. If your question is of general interest it will be answered through these columns; if not, it will be answered personally if stamped, addressed envelope is enclosed. Dr. Huber will not prescribe for individual cases or make diagnosis. Address Dr. John B. Huber, care of Wilson Publishing Co., 73 West Adelaide St., Toronto.

"The future of society is in the hands of the mothers."

ENLARGED TONSILS.

In children having adenoids there is mouth breathing and narrow chest—by which the child becomes starved for oxygen and an easy candidate for consumption; snoring; open mouth; vacant dull expression of the face; unpleasant, toneless modifications of a naturally pleasant voice, such as the "nasal twang"; inability to pronounce certain letters; earache and other ear affections, even deafness, by shutting up the Eustachian tube, which leads from the pharynx to the ear, and which should always be open; mental deficiency, making a dunce of a naturally bright child; frequent attacks of coryza (nasal catarrh); nosebleed; irregular tooth and jaw formation; stunted growth; convulsions; and a generally nervous condition, so that an ordinarily good child is accused of wanton misbehavior or crass perversity. Such are signs of adenoids.

In addition to what I have already stated deformities appear. The natural and uniform development of the face is hindered, leading to the narrow jaw with crowded teeth and the high-arched palate. And it takes the highest skill of those dentists who have made a specialty of "orthodonty"—teeth straightening—to correct these jaw deformities. In the chest, there are likely to be alterations of shape; in some cases the pigeon breast, but in most cases the formation of a hollow at the lower end of a breast plate which the child makes obvious when the parts are sucked in with each inspiration.

When enlarged tonsils are found in children adenoids are sure to be present also in 90 per cent. of the cases. Tonsils are sometimes enlarged from birth; but they usually become so by successive attacks of tonsillitis, or

QUESTIONS AND ANSWERS.

Baby is Restless.

I am nursing my seven weeks old baby every three hours and whenever she wakes at night. She seems very restless at times.

Answer—Possibly the feeding "whenever she wakes at night" is the cause. Babies on the breast do better on 3 hour intervals during the day and 4 hours at night. 6 and 9 a.m., 12 m., 3, 6 and 10 p.m. are right. After the third month discontinue the 2 a.m. nursing repeat. Try if a little water to drink will not soothe the baby at night; babies should always have plenty of water.

Cocoa.

Can one drink cocoa daily without injury to the health?

Answer—Assuredly, once a day. A most nutritious beverage. Just a trifle heavy in the dog days however, since it has a considerable fat content. Not as stimulating as tea or coffee, but more nourishing. It is therefore preferable in cases where tea and coffee excite the nervous system, causing palpitation, tremors and insomnia. This is not to say, however, that tea and coffee are to be abjured for most of us. When taken in moderation the latter are wholesome.

Hogs

Most economical gains on hogs are secured while the pigs are young, and for that reason it is advisable to finish hogs as early as possible, weighing 200 pounds when marketed. Gains on adults are expensive, and feeding them during too long a period loses money.

Weaning time is the critical stage in the life of fall pigs. Three weeks before weaning teach them to eat, supplying a box or creep which admits the little ones only. Feed a little middlings and skim-milk, adding later, some sifted ground oats.

Pigs may be self-fed from six weeks onward. It is best, however, to start self-feeding at about ten weeks of age. With paddock feeding a self-feeder will save fifty per cent. of the labor. On pasture, with running or a continuous supply of water, nearly seventy-five per cent. of the labor may be avoided.

Kitchen Patriotism

By Ruth M. Boyle

"My son and two of my nephews have enlisted. My daughters are making surgical dressings for the Red Cross. I am kept so busy at home that I can't be of any use, and it is hard to have to go on from day to day just as if there wasn't a great war that we have to win. Yet there doesn't seem to be anything that I can do to help."

She was a farmer's wife, and she was managing a home for six hard-working, healthy people. She didn't realize it, but her part in winning the war was probably as important as that of the son who had enlisted and the girls who were making surgical dressings.

This is the way a woman—a home economics expert—who is giving her time and her talent to the Government to find means of conserving the food which is so necessary and so scarce in the world just now, explained it to me.

"War," she said, "depends on wealth. Now, there isn't any wealth except what is to be eaten. If she plans well, our own country and the men at the front can be fed."

No woman can think for a moment of the lads—most of them just in their twenties, remember that—"somewhere" at the front, and not feel impelled to strive herself, if necessary, but no such sacrifice as that is necessary. What does the nation ask you to do?

A few simple things—to save wheat, to save meat, to save butter, to use perishable fruits and vegetables as far as possible in order to conserve those that can be shipped long distances. This does not mean that you must not give your family all they need; in order to keep them in proper health, they must have plenty of wholesome food. But it does mean substituting corn and other grains for wheat, which is needed across the sea. It means using cheese and fish and all possible substitutes for meat. It means that although you may use butter as usual for the table, you must not use it in cooking. Above all, it means the elimination of waste. There should be nothing left on the plates,

and the left-overs should be served at another meal.

Plan your meals with the needs of your country in mind, and you are serving your country as truly as any soldier in the trenches. And then it may be some consolation to you, when you think of your own boy "somewhere" under the colors, to know that you, with thousands of other women, are using your skill and your wit in order that he may be well provided for.

Poultry

Winter is fast approaching, and every advantage should be taken of the fine weather for doing such outdoor work that can not conveniently be done when the weather is cold or snow is on the ground. There are fences to repair, roofs to examine for leaks, and general fixing up of the entire house. The runs, too, need a good cleaning up and spading.

All the old hens, not intended to winter over, should be sent to market while the prices are good.

Now is a good time to lay in supplies for the winter, especially such as incubators and brooders, and to secure new blood that may be needed in the flock. Orders are more promptly and carefully filled now than later on when there is a general rush. The moulting season is surely putting a rusty, unattractive appearance on the fowls. They need a tonic; a few pieces of rusty iron in the drinking water will have a good effect. About five per cent. old-process oil-meal added to the mash is good medicine at this time. Sunflower-seed, mixed with the grain feed occasionally, will add luster to the feathers.

Caponize all the surplus young cockerels during October.

It is not uncommon on farms to allow the poultry to roost outdoors in summer, on trees or wherever they may find a satisfactory perch, and this is often permitted away into the winter months. The practise is not a good one, especially after the fall weather starts. If the stock has not already been placed in the houses, it should be done at once. Exposed hens never have good egg records during cold weather.

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