Conducted by Professor Henry G. Bell

Henry G. Bell

The object of this department is to place at the service of our farm readers the 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.

F.McC.:—I have a gravelly, sand soil, on which I want to sow rye and sand vetch, and then sow sweet clover. When should I sow the sweet clover, in the fall or in the spring, and how much seed per acre?

Answer:—I would advise your sowing the rye in the fall and the sand vetch in the spring. This can be done as soon as the ground is firm enough to work. A light harrow will cover the seed. If the soil tends to be open, it will be well to roll the rye. Follow with a light harrow, preceding both with the sowing of the seed. As to amount to sow per acre, ½ bushel of vetch seed along with about 10 lbs. of sweet clover to the acre should give a good stand.

H.C.H.:—I have 10 acres plowed intending to sow winter rye, but it was not ready in time. I want this field in a cash crop. What do you think of spring rye?

Answer:—If you are in a good wheat section, why not sow spring wheat instead of spring rye? Statistics show that you could expect a larger yield and wheat is selling at a higher price than rye. In order to make a sure stand, I would advise your drilling in about 200 lbs. of fertilizers at the time you are seeding the wheat. Apply fertilizers carrying from 2 to 3% ammonia, 10 to 12% phosphoric acid. It will insure a good stand of grain and will increase the yield and better the quality of the crop.

A.B.:—I would like to have you give me information as to the culture of horseradish, and how they market same. I notice it is quoted in the markets, at so much per dozen, would that be the roots?

Answer:—For best results in growing horseradish, the soil should be plowed deep, early in the spring. As a rule the rows are 24 to 30 inches apart and the space between the root settings are 15 to 18 inches. These are planted from 3 to 5 inches below the surface. In preparing the ground, well rotted manure should be worked deeply into the soil. Top dressing with manure tends to cause the branching out of the roots. The yield of the roots can also be improved by adding from 300 to 500 lbs. to the acre of a fertilizer carrying 3 to 4% ammonia, 8 to 10% phosphoric acid and 1 to 2% potash. These should be worked thoroughly into the soil. Inter-cropping is often a profitable practice in growing horseradish; that is, a crop that can be harvested early is planted between the rows.

I assume from looking up the market reports that the quotation is per dozen roots. These are known as cuttings or sets. I do not find any standard of weight nor size of bundle.

BEDTIME STORIES HAVE IMPORTANT PART IN CHILD TRAINING

By Irene Stillman.

Personally, I look upon stories as very efficient "mothers' helpers" and consider them invaluable in child training, for I have known them to tame the wildest and most unruly of kiddies. Therefore when little Mary Ann or Johnny, Jr., comes to you with the world-old childish plea of "Tell me a story, please," look not upon the time conceded as wasted upon an unproductive amusement, but realize thoroughly that before you is an opportunity to give youth a hypodermic of almost any virtue which you would like it to have under its tender skin and so mold the coming generation nearer to your heart's desire.

A story may be made the sugar coating of a moral pill which "put over" upon the young folk who beg for the amusement will, in further slang, be "good for what ails them!"

The bedtime story is hung with medals! Its possibilities are many. It soothes overstrung nerves, comforts juvenile distress and quells juvenile rebellion, and is such a skillful nurse altogether that it frequently succeeds in tucking the unwilling child into bed when, without its timely assistance, mother would have failed. It acts, properly selected, as a quietus for all the turbulence of the long day, and so brings the childish mind into an ideal state for slumbering peacefully and restfully throughout the night. It is, of course, understood that bedtime stories particularly should not be of the exciting kind or contain any ferocious dragons, giants, pirates or similar characters which might haunt the little folk's dreams.

As a rule, I thoroughly disapprove of bribes, but the story will often prove a most seductive and harmless reward for good behavior while a rebellious child is being undressed for bed or dressed in the morning. The story should be told during the process. Thus no time will be wasted by the mother and the child's concentrated attention upon the story will make him or her easier to handle.

Peacemakers.

And the opportune story is a peacemaker. If you can get children to laugh together after they have quarrelled or if you can get your little boy or girl interested in one of your stories after you were compelled to punish, any subsequent sulkiness or unpleasantness will quickly disappear under its genial influence.

I have known tory-telling to bring parents and children into closer companionship and even comradeship and to even draw the children themselves closer together when they are inclined to drift too far apart in their amusements and the selection of their friends, thus endangering the family unity (although this does not mean that I do not approve of outside and individual interests.) One wise mother who had a small family of quarrelsome children, and who could not spare the time to watch them closely enough to prevent such discord, taught them to tell stories among themselves, impressing upon them that the story-teller holding the floor should never be interrupted or corrected. This gave the children a common interest and made each member of the group interesting to the others. The quarrelling gradually diminished until normal, if not perfect, harmony was established.

Besides, the child who can himself relate tales is acquiring a poise that will serve him well in his adult business and social life. The child story-teller should have some little training in the art, if that is possible. And it usually is, for there are many excellent books upon the art of story-telling that can be obtained at the libraries or, better still, at the bookshops, so that one may have such a book to keep and refer to from time to time.

An instinctively cruel child, where animals were concerned, was taught kindness to them and even love for them and the desire to protect by the effective animal stories related to him by his older brother. The same little lad was taught to love nature by stories of "green things agrowin'."

The Pueblo Indians have some excellent ideas in child training, although, on the other hand, they have, of course, methods which we would find impossible. But that custom of giving their children reasons for the commands laid upon them shows great consideration. These reasons are usually in the form of legends and ancient tales, there being one or more to fit almost every case wherein the child must give obedience. So effectively do the Indian parents tell these revered legends of their race that a sharp impression is left upon the little Injuns' minds and characters. I would say that the wily Indian parents have the happy and wise habit of sugar-coating their pills into tempting goodies!

Right Kind of Stories.

The right kind of stories serve to give breadth to a child's point of view. They serve him in lieu of experience, and many a little lad or maid hard beset with a problem he must solve alone has come to wise decision because of following the course of some beloved character in verse or story. "I endeavor," says one successful mother, one who is fond of telling her young folk stories, "to tell my children tales, true and invented, that will stimulate their imagination, instill within their minds and hearts the love of good literature, and altogether so enrich their intellect that they will find themselves good company when each is obliged to be alone at any time." The latter idea of this mother's is one that should be remembered and practiced by the mother of the poor little "only child" who must now and then, at least, be without playmates. And this story-telling mother goes on to say: "I tell my boys and little women stories of courage, physical and mental, of ideals upheld and even suffered for and died for. Through my story-telling I want them to have good thoughts and true—bless their hearts—and, what is more, express them in their lives."

Very often, too, a distasteful study can be made interesting by looking up and relating incidents in the history of its evolution and biographical sketches of the men who have been vitally concerned in its development. There are studies, too, which can be subtly taught in story form, at least in part, where the young student fails to take them in allopathic doses.

Poor indeed is the little one who has no story-teller at its back and call. You may not be an expert, but some storiless child will give you its ears, eyes and the love of its heart but to hear you relate a tale of your own youth, seem it ever so prosaic to you. Yes, tell the children stories by all means, selecting them ever with the thought of their influence upon the lives and characters of the small listeners!

Strawy manure plowed in just previous to the sowing of grain will not tend to improve the seed bed as a germinating place; it allows the soil to dry out too readily.

Mothers and daughters of all ages are cordially invited to write to this department. Initials only will be published with each question and its answer as a means of identification, but full name and address must be given in each letter. Write on one side of paper only. Answers will be mailed direct if stamped and addressed envelope is enclosed.

Address all correspondence for this department to Mrs. Helen Law, 233 Woodbine Ave., Toronto.

Perplexed Mother:—Raw milk quickly develops bacteria, and to overcome this and prolong its keeping qualities it is necessary to pasteurize it. There is a regular apparatus that comes for this purpose, but you may improvise your own outfit and accomplish successful results. First and foremost a mother must realize that every dish, spoon, bottle and utensil that is used in preparing the baby's food must be absolutely clean, surgically clean, if you will. To accomplish this it is necessary to use plenty of boiling water.

Fill the milk into sterilized bottles. Stop the top well with absorbent cotton and put in a kettle deep enough to hold the bottles. The kettle should be two inches deeper than the bottles. Fill the kettle three-quarters full of cold water and stand a thermometer alongside of the milk bottles. Put over the flame to heat it. Heat until the thermometer registers 167 degrees Fahrenheit, then turn the flame low, so that you can maintain this temperature for half an hour. Remove from the fire and cool rapidly, taking care that the bottles do not break. The kettle should be kept for this purpose alone, and it will greatly facilitate the work of preparing baby's meals if all the utensils, bottles, etc., are kept in a place of their own, away from other household utensils.

If baby is restless, feverish and appears unwell, call a physician. If necessary, cheerfully neglect the household duties to give baby the necessary care. Give the baby a spoonful of boiled and cooled water. Use a piece of absorbent cotton on your finger to wash the baby's mouth. Do this frequently—in fact, after each feeding. It will refresh the child.

Economist:—1. The recipe for the war cake follows. It is made without butter, eggs or milk. Mix one cupful of brown sugar, one-quarter cupful of shortening, cupful of boiling water, two cupfuls of seeded raisins and a half teaspoonful of salt. Boil these five minutes. Cool and add one teaspoonful of cinnamon, a half teaspoonful of mace, one-quarter teaspoonful of clove, one teaspoonful of soda and two cupfuls of flour, which have all been sifted together. Beat well and put into greased, paper-lined bread pan. Bake in a slow oven one hour. 2. Apple butter, such as our grandmothers used to make, requires quarter-peck apples, 2 quarts water, 1 cup vinegar, 1 cup brown sugar, 4 tablespoonfuls cinnamon, 1 tablespoonful nutmeg, 1 teaspoonful allspice, 1 teaspoonful cloves. Cut the apples in pieces and add the water. Cook until soft, then rub through a fine sieve or colander. Do not peel the apples. Cook the vinegar, sugar and spices until very thick, stirring constantly. Put an asbestos mat under the pot to prevent burning. Pour into pots or crocks and cover with paraffine. This is fine for the children and grown-ups. It is delicious on mush, cereal and hot cakes. It is excellent for tarts, very good between layers of a cake, and delicious when combined with a cream cheese, seasoned with salt and pepper and spread on crackers, as an appetizer at social affairs.

INTERNATIONAL LESSON OCTOBER 21.

Lesson III. The Temple Rebuilt and Dedicated—Ezra 3. 8–13; 6. 14-18

Golden Text—Psa. 100. 4.

Ezra 3. 8. Second year—Of the return inaugurated in the first year of Cyrus (Ezra 1. 1). Zerubbabel—See comment on Lesson for October 14, verse 8. Zerubbabel appears here as leader in secular affairs; he may have succeeded Sheshbazzar as governor of Judah. Jeshua—The ecclesiastical leader (Hag. 1. 1. 12, 14). Levites—The men performing the less important functions at the sanctuary (Numbers 18. 1–7). The body appointing the Levites as overseers consisted of the civic and ecclesiastical leaders, the men performing priestly and other functions at the sanctuary, and the lay portion of the community. Twenty—The age of service varied at different periods (Num. 4. 3; 8. 23-26; I Chron. 23. 27). Since only a small number of Levites returned a relatively low minimum age had to be fixed.

9. The general thought of verse 9 seems to be that the Levites accepted their appointment, but the present text is so corrupt that the details are more or less uncertain.

10-13. The laying of the temple foundation was celebrated with great rejoicing. They set—Better, with margin, "the priests stood." Apparel—The robes of office. Trumpets—The priests were specially commissioned to blow the sacred trumpets (Num. 10. 8). Sons of Asaph—The reference is to that part of the order of the Levites whose business it was to furnish the music. According to Ezra 2. 41 the sons of Asaph were singers. David—Though all older documents are silent on the point, in postexilic times the institution of the entire elaborate temple service was credited to David. One to another—Antiphonally. The words quoted furnish simply the refrain. Old men—Fifty years had elapsed since the destruction of the first temple. When the older men, who had worshiped in the former temple, realized that at last a new house of worship was to be provided, they could not control their emotions. Tears of joy flowed in abundance. "The priests blew the trumpets, the Levites played the cymbals and sang; the old people wept, and the younger ones shouted joyfully and trumpeted loudly, so that the noise of the tumult of sounds carried to a great distance."

Ezra 6. 14–18 narrates the completion and subsequent dedication of the temple. Elders—Includes all the leaders in the community life. Builded and prospered—That is, carried the enterprise to successful completion. Haggai . . . Zechariah—The manner in which they assisted may be seen from the books bearing the names of these two prophets. Cyrus—See Ezra 1. 1. Darius—See verse 12. Artaxerxes—Reigned from B. C. 465-423; therefore can have had no part in building the temple which was completed in B. C. 516 or 515. The reference to Artaxerxes may be a later edition. This house was finished—Upon the completion of the work a joyful service of thanksgiving and dedication was held. Offered—The number of sacrificial animals was small as compared with those offered at the dedication of the first temple (1 Kings 8. 5, 63). Sin-offering—In acknowledgment of the people's sins and of their dependence upon the divine favor. Divisions . . . . . courses—For the details see 1 Chron. 23-26, and compare Luke 1, 5, 8, 9. Book of Moses—See Num. 3 and 8.

Ruth's Rainy-Day Box.

Ruth waked that morning with a feeling that something lovely was happening, and it was. The raindrops were pattering on the window, playing tag and leapfrog as they scurried down to say, "How do you do?" to the sleepy flowers.

Ruth dressed like a whirlwind and ran down to remind her mother that it was raining—and, best of all, it was Saturday!

"So may I telephone Louise to come over and spend the day, mother?" she asked eagerly. "And may we have luncheon in the playroom and open the rainy-day box?"

"Yes—three yes-es," said her mother, laughing. "But first let's calm down enough to enjoy a good breakfast."

A few blocks away Louise was so delighted with the weather and the day of the week that if anyone had asked her what she ate for breakfast she would probably have replied, "Autumn rain—and tea at Ruth's."

It was great fun to run along with the raindrops pelting her umbrella and blowing in slyly underneath. Rosy and laughing, she reached Ruth's home and slipped from her dripping raincoat like a gay butterfly from a snug cocoon.

"Mother thought of the rainy-day box first," Ruth told her guest, as she led the way to the big playroom, which was cosy with rag rugs and nursery pictures on the walls. "Uncle John is a carpenter, you know, and he built my beautiful box for me, just here under the windows."

Louise exclaimed over the new window seat, which was piled with pretty cushions, making a real cosy corner, where one could enjoy a storybook or look down into the great maples. "Now we'll pile the cushions into this chair and open the box!" cried Ruth, merrily. "It's a heavy lid, but together—there! See my rainy-day things?"

With little giggles and cries of delight the girls bent over the treasure box, and with quick fingers brought out anything they chose. In one corner were old magazines, picture books, blunt scissors and tubes of paste. There were many paper dolls, a set of flowered dishes,—even tiny glasses with a water pitcher,—and a little blue Japanese luncheon cloth and napkins. In another corner were folded two quaint old gowns and some old-fashioned bonnets, which were grandma's contribution to Ruth's new box.

"First," explained Ruth, "we'll cut out pictures and paste them on these big sheets of cardboard that mother put in—if you want to—"

"Oh, yes!" agreed Louise, hastily. "And here are crayons to color with."

It was absorbing, delightful work to snip the pictures from magazines and then paste them as neatly as possible, leaving no sticky paste to show. Noon came long before the girls were ready for it, although they found themselves hungry enough when Mrs. Day appeared with a tray of goodies and told them to set the round tea table.

There was milk in the tiny glasses, and in a pitcher besides; there were sandwiches, fruit, and such lovely little cookies shaped like birds' nests, only instead of eggs there was jelly in the middle.

After luncheon, which took a long time, with washing and putting away the dishes, the girls played with paper dolls. But the best game was to come; they had saved it for the last, just as they had saved the fattest cooky.

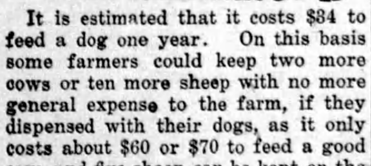
When the little clock struck three, they put away their books and paper dolls, the scissors, the paste and all the other things in the box. There was only an hour left, and they quickly "dressed up." Then, as Mrs. Morning Glory and Mrs. Wild Rose, they lived in opposite corners of the room and called on each other, taking along large, well-behaved families of children.

Some of the Morning Glory and Wild Rose children were unbreakable, some merely of rags; the youngest were of celluloid or rubber.

"O dear!" sighed Louise, as she made ready to go out into the wet, gray twilight. "Why are rainy days three times as short as others?"

Ruth eyed the little clock with a frown, as if she rather blamed it for giving wings to the hours.

"Well, there's one good thing," she said happily. "Grandma is a fine weather prophet, and she thinks it is going to be a wet Autumn."



It is estimated that it costs $84 to feed a dog one year. On this basis some farmers could keep two more cows or ten more sheep with no more general expense to the farm, if they dispensed with their dogs, as it only costs about $60 or $70 to feed a good cow, and five sheep can be kept on the same amount of food as one cow. The neighbors' sheep would be safer, too.

If you feed your lambs by the thimbleful you can not expect to get money from them by the peck measureful. When running on fall pasture it takes from two to three bushels of corn per hundred head when on full ration.

Some method of marking the ewes when bred is advisable. A simple method is to mark the ewes with paint, making one mark on the shoulders of ewes bred the first week, two marks for those of the second week, etc. As the lambing time approaches, the ewes may be separated and placed in suitable quarters. Where the ram runs with the ewes a good scheme is to paint his breast each day and separate the ewes as soon as they show paint on their fleeces. The color of paint can be changed every ten days, and the herdsman can tell how sure the ram is.

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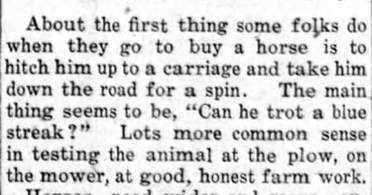

About the first thing some folks do when they go to buy a horse is to hitch him up to a carriage and take him down the road for a spin. The main thing seems to be, "Can he trot a blue streak?" Lots more common sense in testing the animal at the plow, on the mower, at good, honest farm work.

Horses need wider and more exclusive stalls than cows. Enough width is necessary that the horse can lie down and stretch his legs, but not enough to allow him to roll and tear down the stall.

The natural method of avoiding dry, contracted hoofs is to place the horse on a good rich pasture after a heavy rain. Unfortunately it is frequently not practical to give a horse free range according to weather conditions. The best substitute for nature's own provision is to stand the horse in a strongly built trough of water or in a clay puddle from two to four hours once a month.

Give the team a pail of water in the middle of the forenoon and afternoon when doing the fall plowing. Water refreshes the horses as well as the man.

As far as the light-legged horse is concerned, he is practically doomed. The motor car has taken his place. For a number of years the heavy horse will be in demand. He is keenly in demand at the present time.

Fan out all light and shrunken grain as a first step toward selecting seed for the Fall sowing of wheat.

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.

"To be a good animal is the first requisite for success in life."—Spencer.

WHAT TO DO FOR DIABETES.

Most adult diabetics would do well if they would obey their doctor's orders. But it is a very considerable medical experience that such patients are hard to control; they are very prone to do as they please as soon as they get beyond the doctor's observation. Every diabetic must be under a doctor's constant care. Each must be treated according to his own peculiar constitution. Worry, excess, great exertion, exposure must in all cases be avoided. Tea, coffee, and, indeed, all food must be sweetened with saccharin (to be had in 100 tablet bottles of the druggist) instead of sugar. The bowels must move once a day. There are medicines appropriate to the individual case which the family doctor must prescribe. And the diabetic dietary must be faithfully adhered to. Such an one is the following:

Soups or broths of beef, chicken, mutton, veal, oysters, clams, terrapin or turtle (not thickened with any farinaceous substances) beef-tea.

Shell fish and all kinds of fish, fresh, salted, dried, pickled, or otherwise preserved (no dressing containing flour).

Eggs in any way most acceptable.

Fat beef, mutton, ham or bacon, poultry, sweetbreads, calf's head, sausage, kidneys, pig's feet, tongue, tripe (all cooked free of flour, potatoes, bread, or crackers).

True glutens—gum gluten, for instance, gluten foods of known gluten percentage, whole wheat containing gluten beyond that of ordinary farinaceous foods (so-called gluten breads sometimes contain quite as much starch as ordinary bread), oatmeal, almond bread or cakes.

String beans, spinach, beet-tops, chicory, kale, lettuce plain or dressed with oil and vinegar, cucumbers, onions, tomatoes, mushrooms, asparagus, oyster plant, celery, dandelions, cresses, radishes, pickles, olives.

Custards, junkets, jellies, creams (all without sugar), walnuts, almonds, filberts, Brazil nuts, cocoanuts, pecans.

Tea or coffee (without sugar), pure water, peptonised milk, Bulgarian sour milk, lemonade, seltzer water with lemon juice (no sugar).

Avoid: liver, sugars, sweets or starches of any kind, wheaten bread or biscuits, corn bread, barley, rice, rye bread, arrowroot, sago, macaroni, tapioca, vermicelli, potatoes, parsnips, beets, turnips, peas, carrots, melons, fruits, puddings, pastry, pies, ices, honey, jams, sweet or sparkling wines, cordials, cider, porter, lager, chestnuts, peanuts.

QUESTIONS AND ANSWERS

Systemic Infection.

I have been troubled the past year with my nerves. Have headache quite frequently, with pains just back of my ears. And my ears run wax more than ever in the last few months. My eyelids become puffy and my ankles swell. I seem to sweat very easily and lack my usual ambition.

Answer—Ears never run wax; there is a purulent discharge, something more than nerves. There is an infectious process going on in your system. See a doctor at once, lest you come to a serious pass. You have neglected the signs of ear trouble, probably also of the mastoid process behind the ear.

Mrs. Progress and Mrs. Oldways

"Whatever are you going to do with all those old vaseline jars?" said Mrs. Oldways to her neighbor.

"I am making quince jelly," replied Mrs. Progress, "and I'll put some of it into these jars. I save both these and similar jars throughout the year, and find them just right to hold jelly or jam for the children's lunch baskets or to send to a sick friend. This year I am filling more than ever, for they will be so nice to put in the boxes that we send to our soldier boys."

"How I wish I had known about them sooner. Can you fasten them securely?" asked Mrs. Oldways.

"Yes, indeed," said Mrs. Progress. "I seal them with paraffin just as I do my jelly tumblers, and, when they are cold, I screw on the metal tops, put labels on them and the work is done."

"Well, I'm glad I came in; I'm going to hunt up all the little jars I can find. I want to fill some for the soldiers, too." And Mrs. Oldways hurried home.

To help make sure of the germination of the sown seed, roll after the drills and then harrow lightly to ensure a top mulch.

Character Building.

It is so easy and pleasant to govern a child that is naturally yielding and so difficult to deal with one that is wilful and obstinate, that instead of training the latter's will he is often dealt with severely, and the yielding one is praised for what is really a defect of character. Yet, what natural gifts or acquired knowledge can comepnsate for feeble will power,—a readiness to succumb to every strong influence, a dependence on others that is wearying to them, an irresolution or vacillation that defeats every purpose as soon as it is made and prevents steady action in any direction? Though one can not substitute a strong will for a weak one, or adopt settled purposes, he can cultivate that portion of his nature which brings them forth. Every resolve made and kept, every intention carried out, makes the next one easier. "Sow an act, and you reap a habit; sow a habit, and you reap a character; sow a character and you reap a destiny."

Perhaps It Is.

Freddie—It's always in damp places where mushrooms grow, isn't it, papa? Papa—Yes, my boy. Freddie—Is that the reason they look like umbrellas, papa?