Soils and Crops

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UNITING COLONIES FOR WINTER.

One of the essential factors for successful wintering of bees is to have the colonies well filled with young bees that have done little or no field work. There should be at least enough bees in the hive to cover at least six or seven full sized frames at the end of September or early in October. Any colony with less bees than this should be united. One good strong colony is worth more than many weak ones.

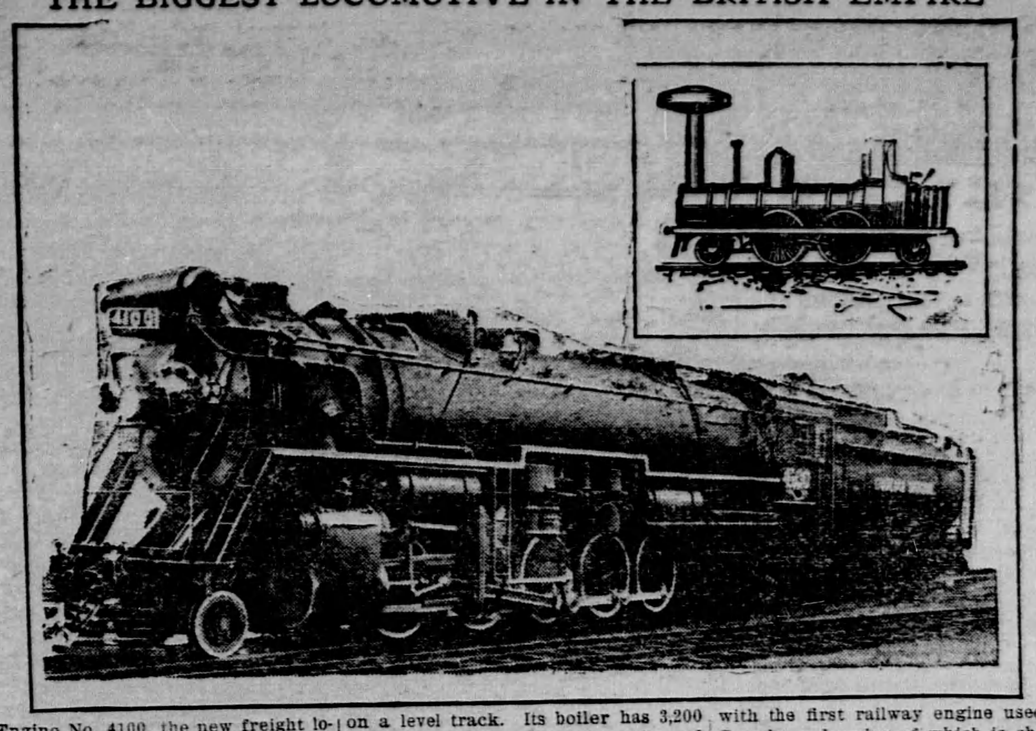
When uniting colonies two things must be borne in mind: first, that flying bees have located themselves and if their hive is moved they will return to the old location, especially if it is good flying weather when the moving is done, and second, that bees of different colonies are likely to engage in a free for all fight when brought together in one hive.

Where a beekeeper has two or more apiaries the first difficulty can be overcome by uniting the weak colonies or one yard to those of another. Where there is only one apiary the uniting is best done during dull weather when the bees are confined to their hives for several days at a time.

An easy method to unite two colonies together without the bees fighting is to first smoke the colonies well and then to remove the cover and quilt from one of them and placing over the frames a single sheet of newspaper. The other colony is then lifted off its floor-board and placed over the first colony with the paper between them. The bees will gnaw holes through the paper in a short time and will gradually unite together through these holes. If there is brood in both colonies this can all be placed in the lower chamber later on, and the top chamber removed. It is well to kill one of the queens just before uniting the colonies, the best queen of course being left. If there is no preference for queens they can both be left and the bees will kill one of them.

Another plan of uniting and one in which all the queens are saved is as follows: During dull weather in the late fall when the bees have been confined to their hives for several days remove from each of the weak colonies five of the lightest combs, shaking the bees from them down in front of the hive and pushing the other five over to one side of the hive. Two or three days later place a tight-fitting division board in the centre of half of the hives with the bees on one side and then bring the combs and bees from the other hives and place on the opposite side of the division boards, thus bringing together two weak colonies into one hive. Provision must be made for a double entrance. These colonies can be fed in the usual manner and can be wintered either in the cellar or outside. By this method a surplus of queens can be had in the spring.

THE BIGGEST LOCOMOTIVE IN THE BRITISH EMPIRE



Engine No. 4100, the new freight locomotive, with new type tender, just built for the Canadian National Railways by the Canadian Locomotive Works at Kingston. It is the last word in designer's skill for lines, weight and power. Ninety-two feet in overall length, it weighs 325 tons, and has a tractive power of 14,500 tons, or the power to move 150 loaded freight cars on a level track. Its boiler has 3,200 horsepower, or more than what is used by the civic electrical plant at Kingston, with a population of 25,000, for lighting and industrial purposes.

The remarkable progress made in the construction of motive power on Canadian railways is illustrated by comparing this giant new locomotive with the first railway engine used in Canada, a drawing of which is shown inset. The engine was used on the Champlain and St. Lawrence Railroad in 1837, and it was named the "Dorchester." The drawing is made from a print in the possession of the Chateau de Ramezay, Montreal.
of the Canadian National Railways

LOTS OF FUN ON HALLOWE'EN

Fortune Telling is Thrilling and Anybody Can Do It You Know.

BY MIGNON QUAW.

Fortune telling is the theme of this Hallowe'en party. From the time the guests arrive until they leave, they are learning something about themselves. This is bound to please, for where can be found any more absorbing topic than ourselves?

The invitations are written on any of the familiar Hallowe'en playthings such as pumpkins, witches, black cats. On these write the following verses:

"Come to our house on Hallowe'en,
There ghosts and spirits will be seen.
The time we've set at half past eight,
And you will learn about your fate.
Your Past and Present, Future too,
What you have done—what you will do.
For all such things are plainly seen
By everyone on Hallowe'en."

The decoration of the house is part of the fun. Feature the smiling faces of pumpkins wherever you can. If you have electric lights, have each light inside a pasteboard shoe box. Cut a smiling face in each side of the box; cover the entire box with black tissue paper, cutting the paper out for the features of the face; paste yellow tissue paper on the inside of the box over these features. When the light is put inside, the eyes, nose and mouth shine in yellow splendor. If you have no electric lights, the effect of faces may be secured by putting a pasteboard box around a lamp as it sets on the piano or table. The box should be large enough so it will not catch fire.

THE PAST.

If the size of one's house permits, the Past could be told in one room, the Present in another, the Future in still another. These rooms could then be decorated to suggest these three periods. Over the doorways could be big signs PAST, PRESENT, FUTURE. The first could be black, the second white, the third, gray.

The hostess calls on three of her most gifted and original friends for assistance in planning the program. One is given the Past, another the Present, the third, the Future. They each try to outdo the others in securing the best fortune. Impress upon each that the Past must be concerned only with *Was*, the Present with *Is*, the Future with *Will Be*. Thus, the Teller of the Past can not say "You are self-willed and stubborn."

Following are some of the things that might be told of the Past. The subject was or was not: a pretty baby—smart at an early age—bald-headed when an infant—troubled with colic—had measles—hard child for parents to manage—been hard to manage—been hard to manage ever since—had one very severe illness—loved first school teacher—had a (named) number of youthful love affairs—had dark secret ten years ago—fond of History in school—was always popular with boys (girls)—an event of great importance early in life completely changed the nature from sour disposition to one of gentle goodness—had financial reverses—crossed in love a (named) number of times—one great disappointment happened a certain number of years ago—lost a treasure or keepsake of which they were very fond, have not found it yet—and so on.

Local hits and jokes can be introduced, depending upon the guests who are invited. Have all the fun of a good natured variety with no sting in it.

The Teller of this Past is dressed in black, speaks in hollow, mysterious tones and wears a mask.

All the facts about the past can easily be told by reading the palms. This does not mean that the Teller would examine the palms of everybody present. This takes too much time and other people grow impatient to hear about themselves. Instead, have everybody examine his or her own palms and hands while the Teller is giving the information. For instance: "The thumb," says the Fortune Teller, "indicates many things." (Meantime everybody is examining thumbs.) "Is it fat? Thick? That indicates you were a fat, chubby baby with a double chin and dimples. Is it stiff? Can you bend it backwards easily? No? Then you were a stubborn child; you held your breath; you would have your way; you received many a spanking." Remember always to give the opposite traits too. Somebody may ask, "My fingers are long and pointed, what does that mean?" Have something ready in reply, and if possible, something to bring a laugh. It is remarkable how many people will begin to not and say, "That is just right. I was a fat baby—" This reading of palms can be done by somebody who really understands how to do it, but if such a person can not be found, a really convincing talk can be invented with all manner of illuminating information about the past. This stunt can be lengthened out for thirty minutes. But if the palms grow monotonous, take up some of the features of the face—nose, eyes, chin, mouth, telling the past from their peculiarities.

THE PRESENT.

The following are suggestions for the Present: subject has many friends—is selfish—has great talent which needs developing—has good appetite—jealous—steady — brave — troubled with snoring—likes sauerkraut—is fine dancer—stingy—sweet tempered through long adversity—political aspirations—fine singer though nobody realizes it—is writing poetry in secret—loves bobbed hair—loves jazz—fond of ladies (gentlemen)—nervous—sharp tempered—should diet, too fat—generous—pessimistic—good business man (woman)—fond of ostentatious clothing like red neckties and loud hats—and the opposite of these.

The Teller of the Present is in costume and wears a mask. The Present can be easily told through the handwriting. This makes a very fine stunt. Each guest has pencil and paper. Have each one write the same sentence: "Billy is going to Toronto to take a job working on the Railroad." This sentence involves the use of capitals, dotting of i's and crossing of t's. The Teller now begins to read the fortunes of everybody at the same time by telling each one to look at his own handwriting. For instance? The slant of the whole sentence indicates much. Does it slant upward? You are optimistic, gay, full of energy, inclined to look on the bright side of life. Does it slant downward? You are pessimistic, gloomy, have the blues often, but you are cautious and for that reason are a better business person that the other ones. Does it run on the level? So do you. Even tempered, easy going, good to live with but yet inclined to be a bit monotonous like a level road through a flat country." Go on reading many things. Small writing, large writing; large ostentatious capital letters; heavy period at end of sentence; no period; dotting of i's and t's. If the crossing of a t runs away after the t, it means the person is hasty, quick, cannot wait. If the letters are sharp and angular, it means the person is nervous, sharp, irritable. If they are fat and generous, so is the maker of them. This stunt can be made to last thirty minutes and keep the interest of the crowd the entire time. They will want to ask all manner of questions about their own handwriting—these can be made the subject of some good-natured laughs.

THE FUTURE.

The following suggest what the Future might tell: a long journey—riches—fame—political success—husbands—wives—children—lives to be ninety—married within year—success in marriage—go to live elsewhere—operation—financial reverses—trip in air ship—single life—letter—good news—company coming—a disappointment coming with the week—tooth going to be extracted—going to receive a present—will receive an invitation—going to a wedding soon—and so forth.

The Teller of the Future needs more equipment. He or she will also dress in costume and be masked. White would be a good costume.

Things to tell the Future with:

Chalk mark on floor. Everybody toes this mark. If they can stand on this chalk mark on one foot for one minute, they will make a model husband or wife. (Seven or eight of the guests can do this at once.)

Untying knots. Each person is given a string which is tied in several knots. If they can untie all the knots in a given time, they will succeed in matrimony.

Ring Toss. Toss a ring over a peg. If they do it first try, this means marriage within the year. Two tries, two years and so forth. To speed this up, there should be several pegs and rings.

Give each person an opportunity to pull a string out from a basket of strings. Those of a certain length indicate the person will live to be ninety.

Toss balloon over string. First attempt your dream will come true.

Lighting matches. If they burn first trial, it means good news within the week.

Burning candles. Run with lighted candle. If it does not go out, it means a long, pleasant journey.

Jumping broomstick. Success in matrimony or a sure marriage.

Height of your prospective husband or wife. Draw slips of paper from basket. On them are various heights and measurements—some ordinary, most absurd.

Rub rubber comb on sleeve. Now pick up piece of tissue paper with it. On the piece is written the name of the person you are to go to supper with. Have different baskets of papers for men and women and two combs to do this stunt with.

Any number of fortune telling games may be done with candles, blowing them out, lighting them, waving them above heads, dropping wax, putting them in draughts. Each one means something very important.

Bowls with various things under them are overturned on a table. The crowd guesses or chooses a certain bowl. They are then turned over and each one means something. One has a single object under it. This means bachelorhood or maidenhood. Another has two. This means a helpmate. Another has three. This means two husbands or wives, and so forth.

TELLING FORTUNES.

The serving of refreshments can also be made the means of telling fortunes—the Future in particular. Tea could be the beverage with plenty of leaves in it or coffee in which a few grounds have purposely been slipped. One leaf or ground indicates single life. Two, marriage. Three, trouble with suitors. Four, a love letter. Five, good news in a letter. Seven, great fortune. Many, finely dotted in cup, bad luck. Few, good luck. Food left on plate indicates you are going to forget some belonging and thus lose it.

When refreshments have been served, find out which girl has the greatest number of husbands, which man the greatest number of wives. They receive the prizes as a consolation. Said prizes are wedding rings purchased at the ten-cent store.

The refreshments for such a party need not be elaborate but they could carry out the fortune idea. The good old custom of putting various articles in cake such as rings and thimbles makes much fun. Why not serve little frosted cakes with some small object in each one, said object having a significance about the Future? If ice cream is served or sherbet (and apricot sherbet would be delicious and carry out the orange color scheme) tooth pick of varying lengths could be inserted and mean something. The little frosted cakes could have orange frosting on them and eyes, nose and mouth marked in chocolate.

Before the close of the evening, one or two people should be chosen to tell their fortunes to the rest, or there could be a grand review, the Tellers asking questions and the guests holding up their hands as certain questions such as "How many are going to take a trip?" are asked.

Such a party as this is not too big a drain on the strength and pocketbook of a hostess and yet will thoroughly delight the guests.

Top Dress.

An application of fine manure applied as soon as the ground freezes, to the thin spots in the alfalfa field, the wheat field, or any grass land will show handsome returns next June. Do it before snow comes.

Feeds for Poultry.

Commencing November 15, 1922, and continuing until May 15, 1923, an experiment was carried on at the Agassiz, B. C., Dominion Experimental Farm comparing various scratch feeds and mashes with the home mixed scratch and mash in general use on the plant, the purpose being to arrive at something conclusive concerning various commercial poultry feeds in the market. The home mixture consisted of: scratch grain of equal parts oats, wheat and cracked corn; mash, 100 parts bran, 100 parts shorts, 100 parts corn meal, 100 parts crushed oats, 50 parts beef scrap, and 25 parts charcoal. Water was kept before the birds all the time. The Superintendent in his report says, "The results are in favor of the home mixture for this particular occasion. This might be the case generally where the poultryman can purchase feeds in large quantities when prices are low. On the other hand, when it is possible to obtain satisfactory commercial poultry feeds from reliable firms, the question of spending time, which means money, in mixing up feeds must be considered."

Cause of Worms in Cattle.

Worm eggs, points out Mr. S. Hadwen of the Dominion Agricultural Dept., are present in the dung of practically all farm animals, much more so than in those which live in cities or towns. The reason for this is that the animals on the farm are constantly exposed to infection from eating food contaminated by manure. First, they come in contact with manure round about the farm buildings, and, secondly, they pick up worms out at pasture in the paddocks or fields that are left uncultivated. These small, rarely cultivated paddocks on a farm are most dangerous as regards worms, and doubly so because they are commonly infected with dung-feeding beetles which act as carriers for worms and convey them to stock.

Better Hog Prices.

There was encouragement for breeders of swine in the Dominion Live Stock Branch market report of Sept. 18. At Toronto the top price for selects was $11.25 against $10.85 on the same date last year, for thick smooth $10.25 against $9.85, for heavies $9.75 against $8.85, for extra heavies $8.25 against $7.85, for shop hogs $9.25 against $8.35, for lights and feeders $9.25 against $6.85, for roughs $7.25 against $6.85, for sows No. 2 $6.25 against $5.85, and for stags $4.25 against $3.85. At Montreal also there was an increase for some sorts, but from the West the report was not so good. Sheep showed an increase at both Toronto and Montreal. At Toronto stock yards a sheep-dipping tank has been installed.

Cutting Alfalfa.

Considerable injury may be done to alfalfa fields by late cutting or pasturing in the autumn. The alfalfa plants should be free to grow after September 25th. Cutting or pasturing after this date is not good practice. To stand the winter the crowns of the plant should be covered with a good vigorous growth of leaf and stem when the snow comes.

The Prince of Wales' best "grass cutters" are shown at work on his ranch at High River, Alberta. They are a famous herd and include many prize winners.

THE CHILDREN'S HOUR

BRUIN FINDS THE RUNAWAYS

With a grunt, Jackie Rabbit sighe and rubbed his stomach. He wa chuck full, and so were Johnnie Musk rat and Willie Woodchuck. Moll Meadow Mouse had fed them so sump tuously that they felt ever so mucl better. They told her all about how they had lost their way after the had come to shore on their log ship.

"I'm sorry friends, that I can't tell you the way home. I have alwayt lived in the wheat field and only a few times have ventured out into the Big Woods. But I do know that way to Frog Hollow path. If you go that way you may meet someone who can tell you the way to Woodland."

So off tramped Jackie Rabbit, Willie Woodchuck and Johnnie Muskrat with Molly Meadow Mouse in the lead. A queer procession it was, a mouse leading a rabbit.

They were only a short way into the Big Woods when they heard a heavy tread, tread, tread in the bushes on their right. Molly Meadow Mouse ducked behind a big toadstool, her heart pounding. Jackie Rabbit and Johnnie Muskrat wasted little time in finding an old hollow stump big enough to hide them both. Now Willie Woodchuck was so scared he didn't know where to go, so he slipped in behind the stump where his two friends were hiding.

Was it the Man after them again, or another hunter? They were all so terribly frightened they scarcely dared to breathe. Nearer and nearer it came, tread, tread, tread!

"It must be the man," thought Willie Woodchuck. "I wonder if he has a gun? I'll just peek slyly around this stump and see. My coat is just the color of the tree and he won't see me."

So, very slowly and slyly Willie peeked around the stump. What a surprise he got! A pleasant one, too, so much so that he gave a glad cry.

"Whatever is the matter with Willie Woodchuck?" thought each of his friends who were hiding. When at last they got up courage to see, there stood a little brown bear, and it was Bruin. How pleased they all were to see him.

"You runaway rascals, where have you been? I have been hunting for you for two days, and so have your mothers and fathers," said Bruin.

Each one began to tell a part of the story at the same time.

"Never mind now, you can tell all about it when you get home," said Bruin. "If we get back before dark, we must hurry. You little fellows must be tired. Hop on my back," he said as he dropped on all fours.

So that was the way the three little runaway boys from Woodland got back home, riding on the back of Bruin.

Preparing Lambs for Market.

Says Mr. A. A. MacMillan, Chief of the Sheep and Swine Division at Ottawa: Undocked and uncastrated grade lambs are always an indication of primitive methods in the handling of sheep, and no farmer who takes an interest in his flock will neglect the performance of these operations. Both are very simple and if properly performed at the right age there is little or no danger of loss. (See Pamphlet No. 46 of the Dominion Dept. of Agriculture.) Moreover docking adds to the neatness, comfort, and appearance of the flock, while castrating enables the farmer to hold his wether lambs for the late fall sales, when a heavier weight usually brings a higher average price per pound. Ram lambs become troublesome in the autumn, their gains are lower, they have to be separated from the rest of the flock or sold, and their value per pound is below that of ewe or wether lambs.

Put Away the Plow.

Neglected implements are a source of loss to the owner and the community. Ontario's implement bill is a large one. If every farmer took as good care of his implements and tools as the best farmers do, many factories and much capital could be devoted to work other than implement making. But so long as there is needless, preventable waste in implements some one must supply, at his own price, implements and tools to keep the farm work going. Now that the close of the tillage season is at hand, a day spent in cleaning, oiling and storing away in a suitable shelter the implements and tools of the farm will pay you well.

Canning and Preserving.

The Dominion Dept. of Agriculture's bulletin on the canning and preserving of fruits and vegetables is a valuable guide to the housewife, and will be found most useful at this time of year. In addition to describing step by step the various methods of canning and drying, the booklet contains a number of favorite recipes for making pickles and preserves. The bulletin should be in great demand throughout Canada.

Corn-Ear Worm.

The corn-ear worm is the larva or caterpillar of a night-flying moth. It is difficult to combat, but as it drops to the ground and spins its cocoon an inch or two beneath the surface of the ground, late cultivation will destroy them and lessen the injury the following season.