



MINNIE MAY'S DEPARTMENT.

MY DEAR FRIENDS:

I have to thank you heartily for your response to my call for letters, and will now proceed to give the names of winners of prizes:

Best letter on Dairy Management—Ellen Mason, Morpeth.

Best letter on the cultivation of flowers—I have received four essays so nearly equal in value that I feel compelled to divide the prize, and will send out a package of flower seeds and a bulb to each of the following:

Minnie Gray, Glenallan.
Lesta Heacock, Kettleby.
Lavinia Parkinson, Eramosa.
Lizzie Colbeck, Brantford.

Below I give two of the letters and may give extracts from others next month.

Minnie May.

THE DAIRY.

A dairy should be built in an airy location, with a northern exposure, away from all impure substances so that the air around be not vitiated. The size depends upon the number of cows kept, and should be so constructed as to preserve as near as possible the same temperature, which should be about 54° or 56° Fahr. This is difficult, but a nearer approximate can be made than is generally done.

Shelves placed round the sides of the room, made of oak or hard stone, which is preferable, supported by pillars, are best and most convenient; they must be kept perfectly clean, as also the floor, for which stone flags or double brick pavement should be used, with a slight slope, to allow water to run off into a drain.

On the outside should be an iron grating, to prevent any ingress to the dairy. Care should be taken to have it well ventilated and a reservoir of water near at hand, if possible. To insure success the most minute cleanliness is indispensable, as it is a well known fact that milk is very susceptible to surrounding effluvia, and should therefore be taken to the dairy as quickly as possible, and immediately strained into free-stone or tin pans, which are quite narrow at the bottom and widening towards the top—thus assisting the oily particles in rising. It should now be left undisturbed till skimming time, which is, as a rule, 24 hours after setting. Some persons wait till the milk curdles, or till fresh pans are wanting. This is a mistake, as the constant parts of milk separate easily while in a state of repose and change quickly. When the dairy, however, is susceptible to the changes of the atmosphere, it should not be skimmed in summer till the milk thickens (if within the 24 hours) yet not long enough to permit whey to rise to the surface. When allowed to stand longer the cream contracts a sourish taste from the milk, the cheesy particles adhere, and the butter is injured.

The sooner milk is skimmed the sweeter the butter, but in this case some of the cream is necessarily lost. My manner of skimming is—make an opening at one side of the pan (pans with spouts are best) and let the milk run off; thus you have cream only, whereas if the cream is poured off, you cannot prevent more or less milk going with it, and a skimmer loses some of the cream.

The cream is put into a stone jar in case there is not sufficient for a churning, and a little fine salt shook in at each skimming, and the whole stirred up and left uncovered.

Churning follows next and should be done in an adjoining room, if convenience will allow. The dairy utensils can also be kept in this room. The jarring of the churn, opening of doors, presence of hot or cold water, &c., changes the atmosphere and arrests the rising of cream.

According to season means have to be adopted of lowering or raising the temperature of the cream. It is best to equalize as you commence, and then continue a rather slow, steady movement, uninterrupted till finished. You now remove the butter into a wooden bowl, previously well scoured and scalded, and with a wooden ladle work well to remove the milk, and having carefully and thoroughly done this, if for present use and you wish a delicate flavor, simply salt and work well again and form into rolls or prints. If, however, you wish to pack, first work well, then wash till the water is perfectly clear; one, or at most, two washings will affect this if the first rule is attended to. Any one who will take pains and try this will feel repaid and discover for themselves that water reduces the flavor of butter. Having washed it, salt, work again and let stand till next day, when the salt will be dissolved. Then wash in a weak pickle, remove,

work, and pack into a well prepared tub. Do not put on pickle from packing to packing. Rather have ready a piece of bleached linen wet with fresh water, lay on top of butter and keep moist. The water in swelling the threads of the linen, protects the butter from the air. Shake a light layer of salt in the bottom of the tub, and another on top just before closing. Now the work is finished, will it stand the test of time and market?

Quality and preservation of butter depends mainly on 1st.—The kind of cows, the food given, the health of the animals, &c.; 2nd.—The care taken of the milk; 3rd.—To thoroughly extract every particle of milk and use a proper quantity of salt. ELLEN MASON.

Morpeth, Ont.

THE CULTIVATION OF FLOWERS.

Elmbrook Farm, Eramosa, April 9th, 73.

DEAR MINNIE MAY,

Seeing your very handsome prize for the best letter on the care of flowers, I write to let you know my method of cultivation. About the latter end of April sow the half-hardy and tender annual seed on a hot bed made in the usual way. Last year I covered with a frame made of oiled paper and found it to answer very well, but I think thin cotton would be better

a little warm. This should be done at least once a week. The plants will look so fresh and green that it quite pays for all the trouble. Some plants require a great deal more water than others; for instance, the Cala Lily should be watered every day, while the Cactus tribe require very little water, especially in winter. I have heard persons complaining that their Cactuses never bloomed, and, upon enquiry, found that they watered them quite as often as they did their other plants, which accounts for their not having any blossoms.

Plants should not be left in the pot too long without being moved, as it is impossible for them to grow and look well with the pot almost filled with roots. They should be taken out, and if expected to grow larger, put into larger pots with fresh earth. Young geraniums and fuschias can be lifted out of small pots and put in larger ones without their ever feeling the removal. Geraniums, fuschias and a good many other house plants can be easily raised from cuttings, and it is best to raise young plants for they generally bear the best flowers. If insects appear wash the plant with warm water; this I think is quite as effectual as anything I have found. A great deal more might be said on the subject, but as my letter is already sufficiently large, I will conclude.

LAVINIA PARKINSON.

Farmer's Cottage

What a pleasant looking place for a home this is. The garden in front, the shade trees, and everything neat. We would like to see our farmers pay more attention to their homes and surroundings. If they did so fewer of our boys would want to leave for city life.



The Apiary.

ITALIAN VS. BLACK BEES.

The great advantage that the Italian bees have over the black bees are not a few; placing them side by side for three seasons in my bee garden, and watching their progress very closely under various conditions, both summer and winter. The first bee to bring home pollen in the spring is the Italian. They are the first to sally forth on wet or stormy days. The queens seem to have more vigor in keeping up their colonies, even laying eggs in the spring before the bees are induced by the warm weather to brood over them. Strange to say, the bees will remove the eggs which fall to the bottom of the hives until the time arrives for raising broods. Italians are easy to handle because they are always at work, and take very little notice of what is going on in the hive. They are found on certain flowers that black bees seem to care very little for. When the honey-producing flowers are scarce, they go to the late clover and sunflower, the latter being a favorite with the butterfly and bumble bee, the Italian being able, with his long proboscis, to sip the sweets and gather pollen in abundance, while the blacks are quietly watching at the doors of their hives, ever ready to fight like Indians at the first alarm. At the height of the honey season, there is no marked difference when all are at work, but late in the season the Italians are out early and late fetching in supplies to keep up the demands of a prolific queen. In wintering, my success has been better with Italians than black bees. The present winter has been severe, no doubt, but as yet there is none of that damp and filthy condition to contend with which caused so great a loss last winter.

B. LOSEE.

Cobourg, Ont., March 13, 1873.

CHEAPENING HONEY.

Honey is one of the pleasantest sweets for family use. It may be secured at half the expense of cane, beet or any other sugar, and I think in sufficient quantities for a general and full supply. In the manufacture of sugar, flowers of cane or beet are raised and gathered, and then the extract secured and prepared, at the expense of much time and manual labor. All the manual labor required for securing honey is simply furnishing a

room for the laborers and receptacles to receive and store the honey when gathered.

The expense depends upon the number of workers employed, and the cost of their sustenance. A farm prepared with reference to the production of honey, with sugar maple, locust, linden, and whitewood trees for shade; with apple and pear orchards, and other fruit trees; with white clover abounding in the fields; and a field of buckwheat, may be supposed to yield five pounds to the acre, more or less, according to the amount of honey-producing trees or flowers. Say such farm of 400 acres will produce 2000 lbs. of honey.

Put 33 colonies into the field, at 60 pounds for breeding season and winter, they will give but a trifle of surplus—200 lbs. might be secured by the strongest colonies, and the weaker fail in that amount, and require an equal amount of other feed to go through the winter, and some of them perish. Profits nothing. Again, suppose you place in the field 20 hives, at 60 lbs. each, they consume 1200 pounds and give 800 pounds surplus—average, 40 pounds. Or, suppose ten hives, at 60 pounds each, are placed in the field; they consume 600 pounds and give 1400 lbs. surplus; average, 140 pounds. The cost in the first case—33 swarms at \$5 each, \$165; 33 hives at \$1 each, \$33; total, \$198, outlay for 200 pounds of honey; that is, one-tenth of the product of the field. In the second case we have twenty swarms at \$5 each, \$100; 20 hives at \$1 each, \$20; outlay for 800 pounds surplus, \$200. In the third case we have 10 swarms at \$5 each, \$50; 10 hives at \$1 each, \$10; outlay for 1400 lbs. surplus, \$100.

In the first case we have one-tenth, in the second case, two-fifths, and in the third case seven-tenths of the product of the field in surplus. In the first case I remark that the supposition is better than the average of apiaries of swarming hives have done, within my knowledge and observation. If we reckon the surplus at twenty-five cents per pound, an outlay of \$198 brings in \$50, less the cost of feeding the weaker swarms.

The second case (non-swarmers) just covers the first outlay and leaves the clear gain of the 20 hives and swarms.

In the third supposition the ten non-swarmers cover the whole outlay three and a half times. With my farmer's hive I have done with the whole number more than one-third better than the second case supposed. The first season, with the Eureka hive, my four hives averaged within fifteen pounds of the last supposed case—125 lbs. per hive, 500 lbs. for the four hives.

In my present location our fields afford no honey after white clover, as no buckwheat of consequence is raised, and I know of no basswood within their range. After the white clover honey harvest, the bees have resorted to the surplus honey boxes for feed, if not removed, and then have had to encroach upon their winter stores. The colony that gave me 200 pounds of box honey in the summer of 1870, and 143 pounds in 1871, stored no honey after white clover had passed by, but commenced upon previously gathered stores. I think, had the basswood been abundant in the vicinity, and had the farmers each raised a few acres of buckwheat, my bees might have added fifty if not 100 per cent. to their surplus.

One other fact I will add: the hive that has done the best I have ever had done by one colony, has simple bars instead of movable comb frames. As I have no occasion to raise queens for sale, or to use the mel-extractor, I think them preferable to the movable comb frames for my use, or for the use of farmers who are not inclined to manipulate their bees.—J. H. in Western Rural.

BEES, HONEY AND WAX.

In the census of the State of Iowa, for the year 1863, we find reported 88,731 swarms of bees, which gave 1,052,685 pounds of honey, and 40,762 pounds of wax. The returns from Massachusetts for 1860 gave as the honey product of that State 59,125 pounds, valued at \$23,223. Statistics show that Austria, in 1857, produced 66,000,000 pounds of honey, and 6,600,000 pounds of wax, valued in the aggregate at \$7,000,000. The production of wax in Russia is estimated at 5,142,000 lbs. per annum. The amount of honey and wax reported in the Department of Agriculture in the census returns for the year 1850 was 14,853,790 pounds; in 1860 it was 1,357,864 pounds of wax, and 25,028,991 pounds of honey, an increase of about seventy-seven per cent.—North American Bee Journal.