

Spring Conditions.

Cheese this spring holds a unique position in the markets of Canada and Great Britain. The proceeds from the sale of the 1902 product aggregated twenty-one million dollars. In boxes the increase over 1901 was 197,000. The market for this year opened earlier, and the prospects are brighter than ever before. The reason for this is the demand in the Old Country. For some reason or other, there seems to be a shortage there, due most probably to a falling off in Australia and New Zealand shipments, and in a small way to the inclination of other dairy countries to manufacture butter. Judging from present indications the demand for cheese will not abate during this season, and the fortunes of those in the business may be said to be at flood-tide.

Canadian butter is not in so enviable a position. While efforts have not been lacking to put the trade on a firm basis by improving the quality and the shipping facilities, the demand in foreign markets is still small. The following communication from one of the British importing firms to the Canadian Government illustrates the position our butter holds in that market:

"Insist on having all the rooms in every creamery thoroughly lime-washed every spring, and also to improve the railway transit by lowering the temperature on the cars to the seaport, especially those from Western Ontario. The butter should be three days in cold storage at the port of shipment before being put on the vessel. The shipping companies should reject all butter above 40° Fahr. when presented for shipment, and the ship's chambers in which it is carried should never exceed 20° Fahr. The universal experience is towards zero. The boxes ought to be made of thicker wood, say three-quarter inch, and made as strong as Australian and New Zealand. The wood should be well kiln-dried before used, and the box waxed inside as at present. The vegetable parchment should be genuine, not imitation stuff as the large bulk of it was last season. In New Zealand experience is showing that not only the best parchment should be used, but it is an improvement to use it double. In the matter of moisture, the driest butters keep best and bring the highest prices. In color, taste is growing in favor of paler butter. Preservatives are necessary for butter which is exported, but care should be taken to use only those preservatives which have boracic acid and borax for their base. British law allows the use of a half per cent. of boracic acid, which quantity is perfectly innocuous to the health of the most delicate person, if it is not even beneficial."

Poultry.

Feeding Hens for Eggs.

A good ration for laying hens must necessarily have considerable variety in its make-up to tempt their appetites, and also should be rich in egg-forming properties. Where the fowls are kept in somewhat close quarters, cut grass and middlings make a splendid morning feed, with whole grain—wheat, buckwheat, and as many more of the grains as can be obtained—for the evening meal. In addition, cut bone fed about twice a week will be found quite an improvement. Vegetables of any kind are good, and can be profitably fed raw. Buckwheat is considered a great egg-producing grain. Many expert feeders say that hens never become cloyed on it.

Of the ration outlined, a large hen will consume about one-quarter pound per day, not counting the grass. To keep her in best health, about two full crops per day are required, and if concentrated food is used it is always advisable to increase its bulk with bran, roots, or grass. At the present low prices of grain, and high prices of eggs and poultry, hens are veritable little money-makers.

Sour Milk for Chickens.

On a great many farms at certain times of the year there is a superfluity of milk, which during hot weather, before it is utilized, sometimes becomes sour. As a rule, when this takes place it is fed to pigs, but another profitable source of outlet will be found if sour milk is fed to poultry. Practically, the pig at the present moment is the only alternative which some farmers consider they have open for the use of sour milk. If milk sours, for instance, during transit and is returned, or if by any mischance it should sour through neglect, it is a great advantage to know in what way it may be profitably utilized. What is the effect of sour milk on the bird's system? The concentrated digestive organs of the bird are kept in good order. Very seldom is liver disease found where sour milk is used. A bird fed on sweet milk does not get the same continued appreciation of its food as a bird fed on sour milk. Apparently, the lactic acid in the milk has valuable properties which are not apparent in fresh milk. These are the reasons why a chicken rearing on

an extensive scale will find the advantage of storing a little milk for use, and the farmer need never be at a loss as to how to utilize his sour milk if he fattens a number of chickens.—[Farmer & Stockbreeder.

The Sitting Hen.

The first essential in raising chickens by natural incubation is to have a good sitting hen, and the next is fresh, fertile eggs. It is almost a waste of time trying to raise chickens with the average Leghorn mother. She suddenly thinks she wants to sit, is given eggs, gets haughty and stands up to admire herself and the eggs, gets excited and impatient, and finally leaves the nest, disgusted. The sitting business is too slow for her nervous, strenuous life, so she gets right down to laying again. She belongs to the short-hour class of workers, and wants her evenings off. She lacks stick-to-it-iveness. The hen to set is a sitting hen: one in whose life throbs the maternal instinct: one that will try and give life to a lump of china. These hens are found in the Plymouth Rock, Wyandotte and Orpington breeds. The larger breeds are also good sitters, but are clumsy with the young chicks. Therefore, to raise chickens set a medium-sized dual purpose (we can admit the superiority of the dual purpose standard in farm poultry) hen on eggs that are fresh and fertile. It is not necessary to put a sod under her, just as good hatches are got from the hay-mow as from the ground, nor to sprinkle the eggs frequently with water, but dust a little insect powder in the nest and on the hen, protect her from disturbance by other hens, etc., and give grain and water daily in a place where she must come off to get them. Test the eggs on the ninth day by holding them up to the light; if any are clear and transparent they can be taken away; they are infertile. Giving the hen these fair conditions she will give a good account of herself in competition with the machine hatcher.

Poultry Yards Now.

Not long since we recommended the enclosing of yards for poultry to prevent the hens from destroying the kitchen garden. We hope it has been done on many farms, as it also gives one a more complete control of the flock and enables a person to conduct the hatching operations to better advantage. The spring and early summer is the time when these runs will be most prized; later in the season the poultry can have the run of the fields, and they will keep down many of the injurious insects, besides making use of grain that would otherwise go to waste, but just now nothing is gained by letting the hens have the run of the whole farm, garden and back kitchen. The habit of stealing away is acquired under such conditions, and results in endless bother in egg-gathering and hatching.

Incubators versus Hens.

I don't think I am an exception, but only one of a large number of farmers' wives who have more work to do than they can well manage, and would willingly keep servants, only they are scarce in the cities, and in the country they are an unknown blessing. Well, we busy wives and daughters don't like to follow the advice of our city friends and give up the poultry, and lessen our work thereby, for I truthfully think the poultry are a decided advantage. They take us out into the fresh air, when otherwise we might not leave the house for a week or a fortnight at a stretch, and, again, they divert our thoughts from the daily round of cooking, dish-washing, sweeping, etc. Now, having shown that poultry are an advantage, surely we had better make as much out of them as possible, and I would like to prove that to do so an incubator is a necessity. It is a wonderful saver both of time and labor. This is the third year that I have used mine, and my hens laid better this last winter than I ever remember their doing before, all owing to having raised early pullers from the incubator. I started the winter with 49 hens, reduced by illness and death to 46, and their return in eggs was:

	1903	1902	1901
January	539	305	290
February	438	215	412
March	660	(Mistake)	368

Anyone can see at once, from the above table, the decided improvement. I always keep about 50 hens. I must add that I had three hens set in February and five in March which reduced the laying number. This year, I set my incubator on February 28th with 107 eggs. Forty-seven chicks hatched, and two were cripples. I set it again on March 24th, and also three hens 139 eggs in all. Ninety-one chicks hatched. Eight were lame, I killed six of them, the other two died. For winter eggs, from hens confined for three or four months, I think I should be well satisfied with the return in chicks. I am afraid the edge of the thermometer is the cause of the lameness. I intend to add it still more than I have done before the incubator hatches again.

It takes me half an hour every morning to feed the chicks, turn the eggs, and polish the burners

of the lamps—two for the incubator and one for the brooder—and, in the evening, five minutes will be sufficient to turn the eggs and change the lamps (put a clean one in the incubator) and trim the burner of the brooder lamp. The incubator chickens stay well together and are very easily managed and trained. I profited by a wrinkle I got from the valuable "Farmer's Advocate," and always keep "Johnny-cake" on hand to feed to the chicks. I make mine very simply and quickly: buttermilk, soda, Indian meal, little white flour, bran and bone meal or crockery siftings. I find it agrees with them very well, and is much pleasanter to feed than mush. TRIX.

Horticulture and Forestry.

Fruits for Eastern Manitoba.

[Paper read by Alex. McPherson, St. Vital, at the Winnipeg horticultural convention.]

I take pleasure in complying with the request of the Secretary for a list of fruits suitable for Eastern Manitoba. I give only what I know from my experience to be worthy. My hobby, in fact, runs more to trees, shrubs and perennial flowers. The following varieties I found best in fruits: Red currants, Versailles and Red Cherry; white currants, Dutch and Grape; black currants, Naples. Green gooseberries, Downing; red gooseberries, Houghton. All of these are hardy and prolific croppers.

STRAWBERRIES.—Four years ago I set out in field 5,000 plants received from Charles City; the following varieties: Beder Wood (stam.), Crescent (stam.), Haverland (pist.), Warfield (pist.) After four years' trial I have decided to abandon further cultivation of this fruit until I can get some power to irrigate. Without this it is hopeless. I have little confidence in windmills in this respect, and hope the society will discuss this question, so important to farmers and gardeners.

The strawberry is called "Queen of Small Fruits." With me it will have to come down to Duchess, as I give first place to the raspberry. I have in cultivation four years the Turner raspberry. It is a very hardy and prolific bearer. Cuthbert, known also as "Queen of the Market," I have only two years, but from appearance it fully justifies its good name. Not so hardy as Turner, but a stronger grower, it freezes back a little, but still there is enough left and to spare, for I cut it farther back. London I planted last year. It is highly spoken of as a leader. I had no success with Golden Queen; too tender. Black-cap raspberries and blackberries I have in cultivation for a short time. Am so far not struck on them.

GRAPES.—I am trying a second time; Janesville I have had two years, and good growth is made. Next year I expect fruit. I have given it winter protection, which none of the others had. Our place should be well adapted to the grape, as the wild grape, Virginia creeper and bitter-sweet are native to it, and grow in profusion.

PLUMS.—I have in cultivation Aikens, Chenny, Bixby, Forest Garden, Rockford, Wolf, Weaver, De Sota, and Hawkeye. In selecting plum trees, by all means give the American varieties first choice, and guard against any but early fruiters. De Sota is too late for this Province. I have found Aitken, Chenny and Bixby to be earliest: Garden City and Rockford about two weeks later, coming in about Sept. 15th.

APPLES.—I can not say much about them. Planted a hundred or more four years ago; many have died, but many still live. While there's life there's hope. Duchess, from cuttings, gave an apple or two, but the trees are not in a strong condition.

CRABS.—I have fruited for three years Transcendent, Siberian, Red and Yellow. Last year's crop was good, and very heavy; trees strong and healthy.

CHERRIES.—Colorado or Rocky Mountain cherry is a hardy, low-growing bush, bearing well. I also mention two pretty little bushes planted last year, Maule's Japan quince and Birch-leaved pear; both easy to propagate by layering.

I hope what is lacking in this paper will be filled in by the following discussion:

DISCUSSION.

Prof. Waldron: I would like to ask whether the raspberries were laid over and protected?

Mr. McPherson: No, they had no protection at all.

Prof. Waldron: Also as to strawberries?

Mr. McPherson: They had no wind-break at all. Prof. Waldron: I would say, Mr. President, that his experience has been more fortunate than ours. At Fargo, over thirteen years' experience leads us to cover them in winter.

Mr. Bedford-Hillborn is the only raspberry that can be called hardy with us.

Mr. Stevenson: Do you cover your black raspberries in winter?

Mr. McPherson: No, we have them in sheltered places among trees.