

from cheesy matter, and need not be washed. Now, seeing that that temperature suits our winter conditions much better than handling thin cream, such as is raised by deep-setting, which must be churned at a temperature of 58° to 60°, and if the temperature falls below that the cream swells and fills the churn, and the butter won't come, or if it does come we find our buttermilk testing from 1 to 3 per cent. of butter-fat; so it may be claimed that the separator gives us complete control of the cream, to suit different conditions of climate; no milk to care for; rich cream in cold weather and thinner cream in warm weather, if we wish it; the best of skim-milk all the time for our calves (I raise all pure-bred calves on skim-milk), besides a cash market for our butter if we wish it, and a gain of a few cents per pound on our butter. It can be said that the separator can be managed to give us the cream of the most churnable quality all the year round, so as to make more and better butter than can be made by cream obtained by deep-setting. J. F. HINDMARCH. Assiniboia.

#### More Harmony Between Maker and Patron.

Messrs. Bell, of Tavistock, Beam, of Black Creek, and other leading members of the Dairymen's Association, emphasized, at the cheese and butter convention held at Guelph, Ont., in March, the importance of more harmony between patrons and cheesemakers. There has heretofore been too much holding aloof from each other, as though each were trying to beat the other in his department. A moment's unbiased reflection should not fail to show that the success of one department is necessary to the success of the other. The maker cannot make good cheese except he has good, clean-flavored milk to do it with, and except the cheese be first-class the price obtained cannot be the highest. Now, what appears to be needed is greater confidence by the patrons in the maker, who ought to be, if he knows his business, in the best possible position to give advice as to the care of the milk.

Mr. Bell pointed out that in the great majority of cases milk out of condition was the result of want of knowledge in reference to its care. So that it is wise on the part of the maker to cultivate a friendly intercourse with the patron; not only giving practical suggestions, but by frequent reminders stimulating a care that may be overlooked through sheer thoughtlessness. Let it be remembered also that the patrons are reading and observing, and it is idle for the maker or factory owner to demand A1 milk if the factory and surroundings present a slovenly and filthy appearance. The factory should be a bright and shining example to the whole neighborhood.

#### Will Alfalfa Flavor the Milk?

SIR,—Will you please tell me, through your paper, if the use of alfalfa, as a pasture, gives the milk any flavor? I seeded down a field of four or five acres, two years ago; had a large yield from it last year; cut it twice, and could have cut it the third time, but used the last growth for pasture. The field was a marked contrast to all other fields, being bright green and in vigorous growth, while the others were parched brown, nearly dead from the drought. My neighbors are going into the alfalfa strongly this season, but many claim that it gives the milk a flavor. I put my cows in the old pasture for half a day, and would leave them in the alfalfa only for two or three hours in the afternoon. There was a strong taste to the milk; but my neighbor's milk, who had no alfalfa, was just as strong, so I am not satisfied that the alfalfa caused it. I account for the strong taste in this way: After the rain set in—the pasture grass being nearly all burnt out by the continued drought—the weeds got the start, and the cows ate up everything green, greedily. Perhaps some of your readers who have used alfalfa several seasons would let us know if they noticed any flavor in the milk from its use. With many wishes for the continued prosperity of the FARMER'S ADVOCATE, I remain, Stormont Co., Ont. E. D. AULT.

### POULTRY.

#### Brooder Management.

BY MRS. IDA E. TILSON, WISCONSIN.

I rented a brooder last April, with which to raise part of my chicks. In fact, I used it as a nursery or infirmary, putting in all the lame, feeble or small ones. For the first few days, its quietness, peace, and even temperature no doubt saved several lives, and even put them ahead of those chicks left under the hens; but the second week those outside secured more exercise, and forged a little ahead. Though we get knowledge in many ways, the famous kindergarten maxim is very true, that "We learn to do by doing." I certainly learned some things about preparing for and buying a brooder. The one I used had its glass in one end, consequently the chicks all crowded there to the light, as soon as they knew enough to do anything, and two feeble creatures, the only ones lost, were trodden to death by their companions. In a glass-topped brooder the chicks would scatter and stay wherever the temperature suited them. A glass top would also be much more convenient to look through at thermometer. Instead, I got down to peak through the end till my knees were like rusty hinges. I hung the thermometer so the bulb would

come about on a line with a chick's head and breathing apparatus, and, by bending the supporting nail, finally got the figures turned in the most favorable light to read. Only one little corner of the brooder was open to let out the sweepings. I should want a whole side movable; in sections it might be, if there was danger of chicks jumping out. I have heard considerable discussion on the height of the incubators and brooders. The incubator, wherein eggs stay till done, might as well be put on longer legs, like some new styles, and prevent so much stooping. With brooders, another point comes into consideration: the higher up, the more reluctant are chicks to venture down and out. By having their ladder wide, I had no great trouble, however.

The main thing in previous preparation is to have a place for every such machine or implement, where it can be kept without moving and without endangering other buildings. No person who has not helped to lift one knows what a massive edifice even a brooder is. In spite of makers' assurances, I have yet to meet a brooder successfully used right out of doors in our far North. Think of the variations to which it thus must be subjected. If placed in the dwelling house, where is the grass run? If in the cellar, there is danger of sore-eyed chicks, as I know from a Dakota correspondent. Although a brooder lamp is no more dangerous than any other light, yet there is risk, and some insurance companies require application for a "permit" to run either incubator or brooder in a dwelling. As Nellie Hawks lately suggested, bargains in old buildings may often be obtained. That meat-market refrigerator, costing \$50, but bought for \$5, must have made her a capital brooder house. A neighbor of mine bought cheaply for his whole hen-house a temporary sort of shanty erected after a fire.

I located my brooder in a shed, open on two sides, and succeeded very well, but during one wind storm the blaze flared so I put out the lamp temporarily and blistered a finger doing this, so hot had the burner become. A brooder out in draughts generally has its lamp boxed, and that tends to overheat burners and makes work getting at the lamp. Newspapers are nice to put in main part of brooder, below the sand or rubbish, and lift out for a cleaning, instead of scraping the wood, but cannot be used in outside draughts, as I found on a few trials, nor my favorite chicken tablecloth of brown paper, for which I substituted stiff strips of shingle, easily removed and cleaned. Our cats are trusty, and did not molest my brooder chicks, though the latter were in and out of their lath yard. Such chicks are more defenceless without their mother's warning voice and sharp beak; hence, if one wishes to be free from all worry about cats or dogs, he needs a yard of fine, high wire.

Before beginning operations with either incubator or brooder, I dig any soot out of receiving tube as well as I can and boil up the lamp burner in soda water, then start with a new wick and the best quality of oil I can buy, though we cannot obtain here the highest tested oil. I should advise filling the lamp each morning and each evening. Being used to a hot water incubator, which kind takes about a day to warm up, I was surprised to find this hot air brooder respond to my wishes in one and a half hours. Of course, should any accident happen, its temperature would rise or fall much more rapidly than hot water allows, hence the latter is generally considered safer. Practice in running an empty incubator or brooder is the cheapest and safest way of learning to manage it occupied. The unpleasant, sickening smell of fresh varnish, etc., will then have disappeared. The first temperature was advised to be 90°. I had proved, by previous trials with two thermometers, that 80° in main apartment meant 100° under the "mother" part, and found that combination a successful average, which was gradually but quite rapidly reduced. Though the chick runs out into a much colder temperature when he leaves his natural mother's feathers, he can immediately return and nestle against her warm skin. Cold air braces him and us, but not a continuous chill. Those with much experience handling brooders say, "Have the 'mother' part warm enough," because the chicks can go out into the main portion of brooder if too warm in former; but keep an even temperature, because the helpless chick has no other refuge if the whole is wrong. English poultry papers give a lower range of temperature for brooders, owing, I think, to their softer climate. Perhaps I succeeded because my brooder was not overcrowded. The provisions for ventilation are sometimes so poor that many brooders really accommodate but one half those they are listed to hold. I found the machine most difficult to run in comparatively warm weather, when the lamp had to be put out occasionally; hence, I believe brooders are designed for early and wholesale work. An incubator is similar, and needs the fresh eggs and eggs all one age. They must also be good for the circumscribed village lot, and I would suppose for fancy poultry, which needs to be well watched over. Farmers working on a small scale, with poor conveniences, better adhere a while longer to the "old way."

#### Setting Hens.

It is well to set not less than three hens at a time if it can be done. On the tenth day test the eggs, remove the unfertile ones, and give the balance, if possible, to two of them. The third one may be reset. The two full broods, when hatched,

can be given to one hen to be reared. The other hen will soon commence to lay again.

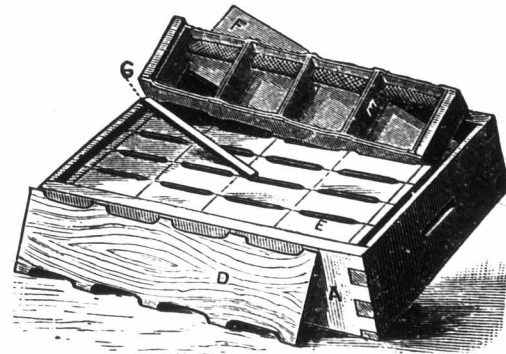
The Poultry Chum recommends sprinkling the eggs and nest of a setting hen with flowers of sulphur to destroy vermin. It is also well to dust the hen with insect powder when she comes off with her brood.

### APIARY.

#### Comb Honey.

As the season of the honey flow approaches, the colonies should be strong and overflowing. Light colonies may be strengthened by occasionally giving a frame of hatching brood from some strong colony which will suffer no injury from the loss of it. This, however, must be done cautiously, and no old bees carried from one hive to the other, as that is most liable to start robbing.

For comb honey the old-fashioned surplus boxes, holding 25 to 30 pounds, are regarded as relics of the past, and even if for home consumption, pound or two-pound sections are always preferable. Section holders, illustrated in the accompanying figure, reproduced from Frank Benton's (M. S.) Honey Bee Manual, with sections folded and in place, each section supplied with thin foundation, preferably full sheets, should be in readiness before the opening of the harvest. Forty to fifty sections for each hive should be prepared.



Super with sections and section holders in place. A, super; D, separator; E, section; F, follower; G, wedge.

The foundation for sections should be the quality known as "thin surplus," or if full sheets be used, "extra thin surplus." In cutting foundation, either for sections or frames, the edge to be attached should be perfectly straight. These should be secured to the wood by pressure, combined in some instances with heat.

Starters half to three-quarters inch in width are sometimes used at the bottoms of sections to secure firm attachment of comb there. Top starters an inch or less in width may be used alone as comb guides when it is desirable to avoid great outlay for foundation.

The use of strips of tin or wood as separators (shown at D) between the sections insures straight combs with smooth surfaces, thus convenient to handle and ship. It is better not to put surplus honey receptacles on the hive until the honey flow actually begins, as no work will be done in them until then. Moreover, all the heat is needed in the brood department during the early part of the season.

### VETERINARY.

#### To Prevent Joint-ill.

The foaling season, which has already commenced, will soon be general. A disease of young foals which occasionally assumes serious frequency in large studs in some districts is what is commonly called joint-ill or navel-ill. The diseased condition of the joint is supposed to arise from an infection of the navel by some specific poison or microbe. The manifestation of the disease is generally appreciable before the thirtieth day after birth; in the majority of cases before the twenty-first; in most, indeed, before the seventh day, according to Professor Penberthy, in a recent address delivered before the Midland Counties Veterinary Medical Association. There is much more hope, he said, for the preventive than the curative treatment. "One most inevitable cause of maintaining the disease," said Professor Penberthy, "was the foal-box. By bringing the mares to the one box everything became contaminated. Therefore the mares should foal in their own boxes, which should be disinfected as much and as frequently as possible immediately before the time of foaling." In addition to such a precaution the navel of the newly born foal should be immediately cleansed and well disinfected with carbolic acid or some ingredient that does not irritate, and in the case of valuable animals something should be used to cover the part for a day or two. The drying parts of the navel cord should be dressed as often as possible with a strong antiseptic. The dusting on of some dry powder, such as sulphate of zinc or a little borax and flour, was what Professor Penberthy generally advised, and it had been followed by extremely good results if the parts had been well washed. One speaker at the meeting very truly remarked that the disease was seldom observed in the case of animals which were foaled out of doors. "Let a mare be in a perfect state of nature and there is little fear of joint-evil."—Live Stock Journal, England.