

for a man's milk according to its value, and eliminate all these unpleasant bickerings and prosecutions. If a man sends you good milk, pay him for it; and if he sends you poor milk, pay him for it according to its quality. Put that proposition before the farmers, and nine-tenths of your patrons will adopt it. Otherwise you put a temptation before men to send poor milk, for if a man can get the same price for milk of poor quality that another milk of richer character fetches, there is no inducement for him to improve the quality of that inferior milk. If the dairymen keep on paying for poor milk—even if it be pure—at the price of rich milk, and then continue to pay for rich milk—also pure—at the price of poor milk, and persist in the indiscriminate pooling of rich and poor at the same price, then the poor milk will yet have with you always.

POULTRY.

Poultry on the Farm.

BY IDA E. TILSON, WEST SALEM, WIS.
Within a marble dome confined,
Whose milk-white walls with silk are lined,
A golden apple doth appear,
Steeped in a bath as crystal clear;
No doors, no windows to behold,
Yet thieves break in and steal the gold.

is Mrs. Barbauld's famous and beautiful riddle about an egg. We all enjoy fresh eggs in winter—"prairie oysters" they are called, and, as children would say, "we want a plenty." If, however, hens could sleep through cold weather, like bears and cats, some poulterers would be satisfied to escape winter's hard work and let their biddies do so, relying upon the more easily and cheaply produced summer egg. But our hens are bound to eat early and often, their appetites grow keen as rapidly as the air does, hence we ought to select their food and prepare everything, that we shall get proper returns for work which must be done anyway.

Fowls, like other domestic animals, can be, and probably are, sometimes kept at a loss. A little investigation of methods where this is the case may reveal an unsorted lot of birds, fed on a monotonous diet of corn and snow, roosting under cold sheds, or crowded into little, dirty, ill-smelling houses, because their owner thinks there is no money in hens. I know of a hen-house so small, low and dark, that a lantern is actually hung in it to light the hens to roost; and so cramped is it, they must all be turned out of doors every day, no matter what the weather. There is really no place to lay eggs in, unless the hens mislay them, which they do altogether. It is said that celebrated theologian, Jonathan Edwards, who was a farmer besides, did not always recognize his own cows. Some moderns are as little acquainted with their fowls, and these fowls, in turn, having been neglected or "shooed" and driven, can hardly apply to their keeper this well-known sentiment:—

"None knew thee but to love thee."

It is evidently a case of little love lost on either side. Quite a treatise, indeed, might be written on "How not to get eggs." Short, sudden, irregular fits of care will not induce laying in winter. Only months of faithful attention can prepare a hen's system for her arduous work. Through rain or shine, heat or cold, in sickness and in health, those hens must be cherished. "Vigilance is the price of liberty," and also of eggs. In nautical phrase, there should be "a long pull, a strong pull, and a pull altogether." The fewer eggs you obtain the more labor you must bestow, and after long, earnest effort, never let a thought come of giving up and losing all your past toil, when your hens are probably just on the eve of laying. Earn success, and it will abide. When she does once begin to lay, a hen that has had continued and thorough preparation will hold out well, like a dieted and trained athlete. It is true, in a certain sense, that an egg is the product of a day, for some hens lay daily. Changes in amount and warmth of food will, perhaps, cause an immediate falling off. But, after all, an egg is not really made in a day, being rather the completion of processes begun long before, as the foaming pail of rich milk and big butter record come from a well-bred, selected, developed cow. That little boy was wise who said to a cackling hen, "You needn't make such a fuss, biddy; God made that egg, you couldn't help but lay it." The poulterer's patience and intelligence, working according to the laws of Providence, produce the eggs, and whoever does not believe so, or gets easily discouraged, or was born tired, is not adapted to the egg department of poultry culture. Last year, sickness in our family prevented me from raising my own chickens, and I bought May pullets. Evidently they had not been taught that laying would be their business. They came to me fond of corn, but unacquainted with and afraid of wheat, bone meal, and such civilized dishes. Corn gives plumpness, but does not build frames nor make strength, and such late chickens, though well-fed and large, cannot get mature enough to lay till after the holidays. I always raised March or April broods for fall layers, but their first days were mostly passed in a warm stable. I had abundance of old rag carpet and sacking for wrapping around coops at night, to prevent those early chills so fatal to little chicks. I took all the chills myself, out so much at that bleak season. Next to early pullets for prompt winter layers come hens one and two years old. Good food increases not only number, but size and substance of eggs. Take heed, however, lest matters be carried too far. Eggs are not a secretion like milk, saliva, etc., but laying is the reproductive process itself, delicate and exhausting. Biddy sometimes makes a failure of her business by producing imperfect and unnatural eggs, shell-less, yolkless,

or double yolked. These seem to result from overstimulation, a second egg having been forced forward before its predecessor was completed. By stimulants are meant not only spices, but too much grain or strong food, and not enough variety of vegetables and other things. A young man I knew declared that if he had the management of hens he shouldn't feed them a thing, and he would show how well they could do, too. I was reminded of that man who tried a similar plan with his horses, but when they got so they could live on two straws a day, they died. Some experienced poulterers do say, "Never let a hen get fat," while others charge us to give biddy all she will eat. My opinion is, more fowls are half-starved than are over-fed; and when over-fed, it is generally on some one handy thing, like grain. Whoever provides a variety of food for his flock must find so much work about the scheme he will be in little danger of overdoing matters. I do not remember that we ever dressed a real fat, healthy hen which did not promise her proper quota of eggs. But, of course, generous feeding, like everything else, has its limit, and I have seen hens so out of shape, so bagged down astern with fat, that it was doubtful whether they could lay if they wished to. Human beings, with higher intellects, sometimes injure themselves by the pleasures of the table; why might not fowls prove gluttons, unless restrained? A variety of food includes all kinds of grain, warmed in an oven or under a stove, puddings of diverse meals, table scraps, ground bone, meat, milk, every kind of vegetable chopped, raw or cooked, beans, peas, hay, and sunflower seeds. A neighbor whose hens have not done well before reports gratifying results this winter, due to a pail of warmed milk and a basket of clover given daily.

APIARY.

The Apiary.

BY ALLEN PRINGLE, SELBY, ONT.
BOX HIVES—TRANSFERRING, ETC.

Editor Apianian Department of ADVOCATE.

DEAR SIR:—Would you kindly give me advice "how to manage a few bees I have this spring. I have three colonies in old box hives in the cellar. They seem to be all right, and they have, I think, plenty of honey to do them till the new comes in. As this is my first winter in the cellar, I would like to know when to carry them out of the cellar, and what to do with them after they are out. I would like to get them into patent hives. Will you please advise me through the FARMER'S ADVOCATE, and oblige. A SUBSCRIBER, Blenheim.

If your bees have plenty of honey and remain fairly quiet in the cellar, leave them there till April, about the time the natural pollen appears on the trees. This time varies according to season and locality, in some places the pollen appearing in March, in other sections of Ontario the pollen does not appear in backward seasons till after the middle of April. If, however, the bees become restless in the cellar before March is out, and show signs of dysentery by spotting the hive around the entrance, it would be well to set them out on their summer stands some fine, warm day to give them a cleansing flight, after which they may be returned to the cellar in the evening, when they will doubtless then remain quiet till it is time to set them out to stay. When you carry them out, lift the hive from the bottom board, and clear it of dead bees and other debris, and with a wing brush off all dead bees and mould which may be adhering to the bottom of the hive and the combs. Should the bees resent this kindness on your part as an intrusion, and begin to puncture that epidermis of yours with what is sometimes called their "business end," blow some smoke among them from the end of a rotten elm stick, or the end of a "bee-smoker," if you have one. Having thus cleared the bottom board and bottom of hive and combs, place the hive in position as it is to remain; contract the entrance in the evening after they are in from their general flight, so that not more than two or three bees can pass in at once, and leave the entrance so contracted till they begin to gather pollen and honey so freely that they clog, then give them more entrance room, and so on as they need it. There are two reasons for contracting the entrance in the spring. The first is to conserve the heat, and the second is to guard against robbers. The usual style with the old box hives is to have two or three holes bored in the front for entrances, and another longitudinal cut at the bottom just above the bottom board; and these are usually left open all the time. Is it any wonder that they are so often "robbed out" in the spring, or freeze out or die from other causes? After contracting the entrances, protect the hive in some way from the cold and wet weather of spring. If the cover or top leaks the rain, cover it properly, and otherwise protect it from the cold.

You say you wish to get the bees into "patent hives." You may do this in two ways. You can either "transfer" them during fruit bloom by turning the hive bottom up and "drumming" the bees up into an empty box placed over it, and then transferring the combs, brood, honey and all into the frames of the "patent hive," putting bees in with them; or you can wait till they swarm, and then put your new swarms into the new hives, and in about 15 to 20 days after swarming, when the brood will be nearly all hatched out, you can transfer the old colony, combs and all into a movable frame hive. The latter plan will be best for the amateur, the other requiring more knowledge and skill.

VETERINARY.

Veterinary Questions.

RETENTION OF THE AFTERBIRTH.

A cow gave birth to an immature calf, which died almost immediately. She was apparently healthy and strong, but never cleaned properly; part of the placenta was taken away by force applied from the outside, but the greater part was left behind, and now she is discharging a yellowish, fetid matter. This is one of the difficulties that stockmen must often have to contend with. However it is constantly recurring, and in this, as in many other diseases, prevention is better than cure. When the calf is fully matured and the cow perfectly healthy, nature generally performs her part perfectly; on the other hand there is always a percentage of cases where cows do not clean perfectly, and the placenta is allowed to rot away, undermining the health of the cow; she loses flesh and milk rapidly, and often turns out hopelessly barren. The proper treatment in these cases is to take it away by hand, in about 36 to 48 hours after the birth of the calf. At this time it will be found comparatively easy; the neck of the womb has not yet closed. The hand, well oiled, must be introduced into the womb, and the attachments separated one at a time from their connections with the womb. The process may be slow, but is much easier at this stage than immediately after calving, as nature has assisted and only requires further help. If allowed to remain longer, the neck of the womb will have closed and the difficulty before stated has set in. Farmers are often persuaded to have recourse to nostrums of different kinds, but the above is the only true remedy.

How Can Tuberculosis in Farm Animals be Mastered?

BY J. R. HENRY, CHATER.

After reading the lengthy letter by Dr. Mole, of Toronto, regarding this perplexing disease, it becomes necessary to ask the above question, and every person who has the interests of his fellow-beings, as well as that of live stock, at heart, should halt for a moment and give the matter consideration. The statement is made in the above-mentioned letter that a large per cent. of the cattle of this country (the Dominion) are affected with the disease, and if that be true (no doubt the statement is based on good authority), it certainly is an alarming state of affairs, when it so directly endangers the health of all Her Majesty's subjects. In my opinion there is only one safe way of effectually eradicating the nuisance, and that by the enactment of such a law as will strike at the root of the evil. The law for compensating a person who thinks his animal is diseased and has the same killed is not enough, for in tuberculosis the disease may be of long standing before any outward signs can be observed. At present, if a man sells an animal nearly dead with this disease, and upon killing the buyer finds the carcass unfit for food, he has to be the loser and has no redress whatever. This being the case, a great many carcasses of meat unfit for food could be placed upon the market by dishonest butchers. Where consumers are in the habit of using half-cooked meat, there would be great danger; and at any rate, any meat that is diseased is not wholesome food, if it were cooked till Doomsday. The butcher can ill afford to lose the whole cost, when only handling the beast for a small profit or wages; and thus the present system has very strong tendencies to encourage dishonesty in those who are slaughtering largely.

I know a man in Ontario who purchased an aged Shorthorn cow at beefing price, and after keeping her a few weeks she showed no gain in flesh, and did not feed as she ought, so he killed and dressed her for market, providing she proved to be right. But the inner portions of the meat were badly diseased with tuberculosis, and had he been dishonestly inclined, three quarters could have been dressed and placed upon the market at a good price, for it was nice. Upon ascertaining the nature of the disease the carcass was buried, and he could not collect a dollar from the previous owner. If the miserable pest is ever to be gotten rid of, the only way of doing so is to legislate, so that any person selling an animal found to be affected in this way, would have to pay back the money; and it is a foregone conclusion he would make no delay in seeing well to the remaining members of his herd, and would not rest till he had stamped the last remains of the disease out. It matters not how soon the trouble is known, and the very mildest form swept out of existence.

So long as a stock owner can dispose of animals that are not sound and get his pay, no one to molest, the trouble will ever exist. The matter should have a careful investigation, and the best means to check its spread adopted. The scheduling of Canadian cattle in Great Britain is received amongst Canadians with great alarm. If the efforts set forth to regain our former position prove successful, and our customers across the water find that our herds are badly diseased with tuberculosis, have we anything to warrant us that our meats and dairy products will continue to hold first place, in the estimation of the consumers of the Old World?