

Abusing the Hand Separator.

There are two ways of abusing the hand separator-one by misusing it and the other by maligning it. But for neither of these is the hand separator to blame. The hand separator has become so popular that in some of our states the number of hand separators in use doubled annually for a number of years, and it is now estimated that in some states the machines are now in active service on one-third of the farms that are supplying cream or milk to factories.

This increase in number of hand separators in use has of course been increased by the number of central butter-making plants. With the increase of these plants have come new methods and new men. Not only are there new men at the central butter-making plants, but all of the patrons that have the hand separators are somewhat new at the business. The latter have not learned how to properly take care of a separator, and thence comes one kind of abuse. The milk is run through it and the separator is not washed, the farmer having somehow obtained the idea that once a day is often enough to clean the machine. From the time of separating the morning's milk till the time for separating the evening's milk the films of milk are left in the machine and in that time dry on. Moreover much of the slime that accumualtes in the bowl continues to remain there throughout the day. This is bad in winter and worse in summer.

Is it any wonder that the milk that goes through such a separator becomes bad in less than twenty-four hours in summer time, or that the cream separated by a machine so kept ripens too rapidly in the cream vat or has in it taints that lower the quality of the butter? Then begins the abuse by the creamery buttermaker. He declares that cream from hand separators is bad and that they ought to be driven out of the state.

But it is clear that the men are the ones that are responsible. The first man was to blame for not caring for the separator as it should be cared for, and the second man was to blame for not putting the blame where it belonged. It is absurd to talk of discarding a good thing because some of the men that have them are too lazy or careless to keep them clean.

## 16 Per Cent Low Enough.

The United States government made a ruling about two years ago that any butter found on the market containing more than 16 per cent of water would be considered adulterated. A large number of creamery buttermakers and a few farm buttermakers had trouble with government inspectors because their butter when sold on the market was found to contain moisture in excess of 16 per cent. It is not probable that in all cases this excess of water contained was intentional on the part of the buttermakers. Especially on farms, the buttermakers have no way of telling how much water their butter contains. When the temperature is in the nineties in the summer time the churning is certain to incorporate more than the legal amount of moisture, as the higher the temperature the greater amount of moisture incorporated. We notice that some of our contemporaries are advocating that the government lower the standard to about 14 per cent We believe that the present standard is low enough; for the lower the standard the more certain it is to be exceeded by the makers of butter on the farm.

The importation of Australasian butter into England doubled last year over the former year.



A Farmer's Flock.

I suppose you will regard me as heretical because I am not following the beaten track mapped out for us farmers by the numerous writers on how to raise poultry. I will admit that I might have a flock that would be more of an ornament to the place, but I am too busy about my general farm work to devote the time to my poultry that my wife and others thiak I should give. However, taking all things together, I am quite well satisfied with the results.

I can't say exactly where my fowls came from or of what breed they are; as they are the product of miscellaueous crosses for twenty-five years. I have simply purchased new fowls from time to time and turned them in with the flock, taking no care to select eggs for hatching.

But here is what I have done: I have killed off religiously every year for ten years all the hens that did not begin to lay early in the winter and continue to lay till very late in the spring. I have in a way thus carried on a sort of selection from year to year. I have the double purpose of getting better pullets and better cock-

During the past five years I have kept a strict account with my hens and find that the egg yields are gradually increasing on the average. The first year I kept an account I got 127 eggs per hen on the average, and the past year I got 142 eggs. That is not an extraordinary record, but it is much better than most of my neighbors do. I am satisfied that the common farm hen does not lay 100 eggs a year on the average.

Moreover, I get at least 40 per cent of my eggs during the period of high prices, while I am sure that many of my neighbors get their eggs almost entirely after the prices have fallen sharply. This is a big item, and the difference may be all counted as pure profit.-Sylvanus Banks, Champaign Co., Ill.

# Pure Bred Stock.

Pure breeding counts for less in the poultry yard than in the cow stable, horse stall or feeding yard. The reason is that pure breeding in poultry has not been along the line of greatest service, but largely in color of feathers and form of body. Pure bred birds are valuable principally as a foundation on which to build good strains of egg layers. This applies especially to the egg laying breeds. In the matter of meat fowls pure breeding has a large value, but even in that case has not the value it should have.

We say "get pure bred birds," but we do not say it with the same energy and enthusiasm that we would say to the horse breeder, "get a pure bred stallion." In the coming time we must do more than we have in the past to get utility fowls and establish strains of fowls that are valuable because really useful. This work is being taken up to some extent here and there and is aided by the use of the trap nest, but even that is a halfhearted way of getting at the task of improving the breeds.

## First Hatches.

The first hatches of the chickens usually come off in cool weather and have to be looked after carefully to make sure that they are properly housed and fed. The ground is wet at this time, and the old hen sometimes does not use "good common sense" in selecting the place where she will hover the chicks. Sometimes at this time of year the chicks have rheumatism so badly that they can't walk, and this is due to being hovered on wet cold ground. Wet ground is always cold.

Three Beef Calves.

We have three beef calves that we are raising for feeders, and we intend to use the feeders ourselves and finish them in about two years from birth. They are all from grade Durham cows that are good milkers. We have kept these cows from a much larger number because of their large milk flows. We breed them to a good Durham bull every year and raise the calves for the meat they will produce.

We have found it quite easy to bring these calves along without giving them a set-back at time of weaning. which is generally when they are from four to six weeks old. We cannot afford to feed them whole milk, for we want the butter fat in it for the making of butter. Of course during the first two weeks we have no use for the cow's milk, as it is not considered at that time fit to drink.

These three calves get all the skimmilk we have and a little porridge besides. We also feed them some ground linseed, just a little to help out on the fat. We have found that it is best to feed the calves warm milk for some weeks and then to feed only a little at a time. It is very easy to get a calf's stomach out of condition by feeding too much cold milk. The three calves we now have are doing excellently on skimmed milk, the oil meal spoken of and some dry corn. We have found that dry corn is more readily digested by calves than by mature animals. When the calves get to be about a year old or a little earlier than that their stomachs undergo a change and after that corn is not well digested. But while yet calves they digest the corn perfectly.

These calves are now over two months old and are eating a good deal of clover hay. So we feel safe in feeding a good deal of dry corn, as the clover hay and skimmilk give an overbalance on the side of protien. I think it is as bad to have too much protein as too little. The calves have made a good growth, and have developed such appetites that the skimmilk from the three cows now satisfies but a small part of their hunger.

We are going to raise these calves by the most scientific methods and intend to keep them growing. You may hear from them later.

Carroll Co., Ind. Joseph Bowler.

## Sheep and Water.

There has always been a great difference of opinion among English water sheep should have. Some follow the practice of giving these animals all the water they need. Others say that if the sheep want to drink, something is wrong with their pasture or the other feed they are receiving. Some of the successful shepherds do not favor giving water to sheep. Its place is supplied largely by succulent feed, which is composed largely of wa-

## Fine Stock Associations.

There is an abundance of room for many more fine stock associations than now exist. The great national associations have a work to do and are doing it; the state associations have a work to do and some of them are doing it; but in every county there is another kind of work to be done by associations that is not yet being attempted. Small local fine stock associations can "get down to business" as larger associations cannot.

## Tillage.

Tillage of soil always improves it. and the more tillage is given the greater is the quantity of plant food that is set loose. This reduces the soil to a fine state and lets in the air to all parts of the soil. In a soil so treated roots ramify greatly and easily collect vast quantities of food. The resultant growth is often remarkable.



Shear Early.

The practice, still so common, of postponing the shearing of the sheep until late spring is a relic of the days when sheep were kept for the wool alone. It was thought that by leaving the fleece on until after a considerable amount of hot weather had passed it would contain much more grease and thus a greater weight of fleece would be secured. Even if a greater weight of fleece were secured by this practice there would be nothing gained so long as the wool was sold on its merits to a party who was a good judge of its scouring qualities. There would be no greater weight of clean wool; only more waste matter to cleanse out.

On the other hand, it is very doubtful if late shearing gives any greater weight of fleece, even with the more oily-wooled breeds.

There is more or less loss of wool through shedding, particularly on the part of the ewes with lambs, where the shearing is not done until late. Also there is a less annual growth, as with the heavy winter coat left on after the weather gets warm, nature's effort is to remove this rather than to grow more. With the winter overcoat removed at the beginning of warm weather, there will be a more continuous growth throughout the year. There will be more clean wool and it will be of longer staple and better quality.

Early shearing, before the sheep go to pasture, is also conducive to a brighter and better condition of wool by avoiding the soakings from spring rains. Also, the sheep do much better if they have their coats off when the weather gets warm. As to exposure, if there are fairly warm sheds or barns for shelter in case of a sudden change in the weather, the sheep will not suffer as much from the loss of their natural protection at this time as they will by having it removed in the spring and then be caught in a cold all-day rain in the pasture.

By shearing before the field work opens up, there is the additional advantage that it does not interfere with other important work .- J. J. Edgerton,

## A Radish Bed.

Every one considers it easy to grow radishes, but I have not always found it so. It is one thing to grow radishes and another thing to grow radishes sheep breeders as to the amount of that are tender, crisp and really nice to have on the table. To get a good radish, it must be grown quickly. To get quick growth we must have both a rich soil and moisture.

For my radish bed I prepare the ground very carefully, working in manure and fining the soil as much as possible. When the seed is sown I see that the ground is warm enough to permit of the germination of the seed, though of course radish seeds do not require as much heat for germination as do some other seeds. The soil should not be a heavy clay, for in that case it cannot be worked fine enough. The lumps prevent the seed covering itself or of remaining covered and the air dries out the soil so quickly around the seed that the little sprout is killed. When the soil is largely of a sandy or loamy nature the seeds are covered enough to keep them moist and quickly send up leaves.

Later, when the soil gets very dry I use water to keep it moist. I have a hose by which the water is supplied to the radish bed, for of course one could never afford to carry water in a pail for the supplying of the radish bed. I believe that every farmer should have an artificial supply of moisture for use in his garden during the dry spell, which sometimes begins in the middle of May .- Milton Knight, Cherry Co., Neb.