



Sweet Skimmilk.

There is no better ration for the calf than sweet skimmilk. After the calf has been weaned it still has a craving for the kind of food that nature provided for it. The feeding of nearly sour milk has been practiced, and the feeding of whey, but we are sure that the calf has no particular liking for that kind of food. Under modern methods of dairying it is possible on many farms to have the skimmilk sweet. Where hand separators are used, of course it is an easy matter to have milk of the kind we have indicated. Even where the milk has to be hauled to the creamery, the farmer can, if he will, have milk that is sweet when he gets home from the creamery. If it is not, he has himself or the creamery to find fault with about it. If it is the creamery, he should take the matter in hand at once. In many cases it is the fault of the other patrons of the creamery, if the skimmilk is sour when the farmer gets home with it. The said other patrons have got into the habit of hauling to the creamery milk that is sour or nearly so. Perhaps they are "every-other-day" men. The milk they bring is skimmed and of course the skimmed milk goes into the tank from which each man draws the skimmilk to which he is entitled. The sour or nearly sour milk thus mixed with the other and better milk acts as a starter and sets the whole to souring. All the farmers on returning to their homes from such a creamery find the milk sour. This is a matter they should look into. There is no reason why all should allow themselves to be injured by the few.

Sometimes the farmer is himself to blame in not having his cans in proper shape for the reception of the milk at the creamery. It may be that he himself is bringing milk in cans that have "starter" in all the seams. If so, he should clean up and clean up vigorously. The sweet skimmilk is what he needs especially if calves are to be fed, and the sweetness is worth striving after. The younger the calf the more need there is that the milk be sweet, for the more delicate is the digestive apparatus that is to handle it. For such animals some feeders assert that sweet skimmilk is worth twice that of skimmilk such as is usually received from the creamery. Scours is one of the greatest causes of calf mortality. It is induced by the kind of food the calf receives, and it is believed that both sour milk and unusually cold milk help along the bad effects. Sweet milk is of too much value on the farm to be ignored.

Progress in Buttermaking.

In no other industry has there been greater progress during the last few years than in dairying, says M. Mortensen. The methods employed by buttermakers ten years ago will now not be recognized by any up-to-date buttermaker. The machinery is different. The buttermaker who at that time was generally chosen from the ordinary walks of life is now a man who has attended school for perfecting himself in his profession. Some years ago one of the leading questions at the convention was, how to avoid mottles. This is a thing not frequently spoken of to-day. The buttermaker as a rule now understands the mechanical part of buttermaking to such an extent that he knows how to prevent mottles. The question of most importance now is how to make a high and uniform grade of butter possessing keeping qualities. We do not aim to make the kind of butter that used to win sweepstakes a few years ago as that did not very often possess keeping qualities. The butter now in highest demands is quite different from our fancy butter of a few years ago.

POULTRY



Utility of the Wyandotte.

It is claimed that the unusual combination of so many breeds in the make-up of the Wyandotte causes it to produce eggs of uncertain shape and size, says a bulletin of the Department of Agriculture. If this contention is true, why is not the same true with all crossbred (or made breeds) fowls? Whether this is a fact or not, only careful observation will determine. It is a well-established fact that the egg production of fowls



SILVER-LACED WYANDOTTE PULLET.

can be improved in both number and size if attention is given to the selection of breeding hens. Only those that lay the greater number of the larger size eggs should be selected.

If the greatest attention is paid to inbreeding for form and color, the number and size of eggs produced by each hen will grow gradually fewer and smaller, while, if the whole purpose is toward more and larger eggs, that result will be obtained, and form and color will gradually decline. The Wyandotte, having been for years the favorite as an exhibition fowl, it may be possible that some of the most extreme line-bred strains have suffered in number and size of eggs, but this fact has no bearing upon the average utility flocks that are kept for producing table eggs.

All records place the Wyandotte about the equal of the Plymouth Rocks in egg qualities, although the Plymouth Rock is credited with an average of somewhat larger eggs perhaps justly so; but eggs are sold by the dozen, and an ounce or two in a dozen counts for little. The value is in the number produced. At the same time, the larger egg is more attractive, and it is well to give attention to increasing the size. No fowl can surpass the Wyandotte for market poultry. At any time of its existence, from the small broiler to the roasting fowl, it is always plump and attractive. The close, compact body, the plump breast and rich color of meat and skin give it many advantages over others. It looks better than the long, lanky type of fowls, even when in inferior condition.

Laying Qualities of Old Hens.

We know little of the laying qualities of old hens. In the main it has been assumed that a hen lays the greatest number of eggs from the time she is one year of age until she is two, or from the time she begins laying her first "clutch" till a year from that time. It is so well settled in the minds of some of our poultrymen that a hen will not again equal her first performance in egg laying, that only pullets are kept and the two-year-old hens are killed off. This in general is perhaps true, but what about the exceptions? We know very little about the exceptions, as not enough experiments have been made to bring them to notice. A few experiments have been made with lay-

ing hens and those have seemed to carry out the popular notion as to the superiority of the pullets. Thus, one instance is cited where two pens of Leghorns were kept for three years. They averaged 175 eggs per fowl during the first year, 132½ during the second year and 116½ during the third year. The per cent of profit on food was 188 the first year, 118 the second year and 97½ the third year. There are some things about this test, however, that are not shown. One of them is the individual performances of the birds. Were there not one or more that laid as many eggs the second or third year as the first? Then how about the weight of the eggs? Were not the eggs the second and third year heavier, each one, than when the hens were pullets? Every poultry raiser has noticed that pullets' eggs are usually very light and that the eggs from mature hens will run much heavier. What was this difference?

These things must be taken into consideration when summing up the whole matter for and against the old hens. We doubt not that the older birds have more in their favor than has ever been granted. We know that now in the market an "egg is an egg," and that a light one frequently brings as much as a heavy one. But that condition will not always last. The time will doubtless come, as it should, when eggs will be sold by the pound instead of by the dozen. Then the mature hens will have their time of popularity.

One poultryman says that he keeps some of his best layers till they are ten years of age and that some of them have laid well till that age. There is one thing in favor of the mature hens and that is that the birds hatched from their eggs are generally more vigorous than are the birds hatched from the eggs of pullets. It is also probable that they are more fertile and that one hundred of the eggs from mature hens will give a much larger percentage of chicks than will the like number of eggs laid by pullets. Finally, the real value of the mature hen as a layer can only be told by numerous careful experiments. A few experiments are misleading, for the individuality of the birds in that case assumes too much importance. No station is at this time making any experiments that we know of along this line, and it is not probable that private persons are trying to discover the truth of this matter. It would be interesting indeed to follow the carrying out of tests to discover the approximate truth of the relative value of old and young hens for egg production.

Duck Houses.

Duck houses should not have as much light as hen houses, but should have a shed open on one side attached for feeding and watering. They should have no nests, but be bedded down every two or three days with baled shavings. The houses should be cleaned out at least once or twice a year. No egg boxes are required, as the ducks lay on the floor, and if the bedding is added often the eggs are not soiled much. For twenty-five birds the yard outside should be 25 by 100 feet. The inside of the houses should measure 12 by 12 feet. There should be a trough 12 inches wide and 6 inches deep of any length desired. I water the birds in a 16-quart pail. In the winter I feed in the shed and in the summer out in the yard. No running stream of water is required. The gable overhead next the roof should be stuffed with straw, with two little doors in each gable to open in damp weather. This keeps the house dry. In cold weather these doors should be kept shut.

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The irrigating of strawberries where practiced has been found to be very profitable. The application of water at the fruiting season enormously increases the crop, as has been demonstrated at Wisconsin, Missouri and other experiment stations.



Fresh or Rotted Manure.

There was a time when all advice given on the manuring of land for almost anything was in favor of applying "well-rotted" manure. It had been observed that the results from such manure was very good, especially when the results were judged a few months after applying. But in time the chemists took hold of the question and examined manure both at time of its being made and successively month by month for a year. Both the volume was considered and the amounts of fertilizing matter left in the manure at the various times of analysis. It was proved without contradiction that in the course of a year, even under good conditions, the manure pile decreased in size fifty per cent, and that the manurial contents decreased from 30 to 40 per cent. There was not only a loss of fertility, but of humus, which seemed to be burned up in the chemical operations going on. We know from other scientific investigations that these chemical changes are constantly going on in dead matter, whether vegetable or animal. We further know that the humus is one of the most valuable elements entering into the value of the manure pile.

The old idea of composting was a good one, but we have now an improvement on that idea in the quick application of all manure to the land, as in that way the land gets the most benefit out of it. We are gradually awaking to the fact that the land needs to be improved physically as well as in other ways, and this is a somewhat new fact in the minds of American farmers. By putting the manure into the land as soon as made, we get the full benefit of its mechanical effects. We now look for the influence the manure is to have in a course of years rather than its immediate effect as seen during the season of its application. It should be remembered that one of the chief reasons for the use of barnyard manure is now seen to be the keeping up of the supply of decaying vegetable matter in the soil.

The Presence of Sorrel.

Soil students are divided as to whether or not the presence of sorrel indicates acidity in the land. There are many things to show that it does, and perhaps some to show that it does not. The first opinions were doubtless formed on the fact that sorrel is sour in taste. The cultivators quickly jumped to the conclusion that land that would grow sour plants like sorrel must be sour. This reasoning is not good, as we grow rhubarb on the best and sweetest of land. But the early students, though founding their opinions on a wrong premise, came near to the truth. One of the reasons why we believe that sorrel land is sour land is that the soil on some such land has been tested and found to be acid. Of course, this does not prove that land to bear sorrel must be acid, but it is an indication pointing in that direction. Another proof that this land contains too much acid is that lime when applied has a good effect and often after its application the sorrel disappears. Here, too, the opposing theorists would say that the case is not proven. They would say that the lime stimulated the other plants so much that they grew and crowded out the sorrel. It is safe, however, to assume that land that will bear sorrel in profusion is sour and needs lime to neutralize the acid.

The sale of oleomargarine has decreased very greatly since the passage of the law prohibiting it from being colored in imitation of butter. The total sale is said to have fallen off from 25 to 50 per cent in different parts of the country.