

great success has been obtained by bulls from 1,000-gallon cows with a Scotch cross.

It is all wrong to think that heifers of the beefy class will not become good milkers if they are handled in the right way. It only requires suitable treatment in feeding for the dairy, and in most cases they will give the required quantity to be entered in the D. S. H. B. records.

Whitewashing Stables.

Editor "The Farmer's Advocate":

Nearly all dairymen whitewash their stables, but those who have found the quickest and best method of doing it are comparatively few. Most people seize a broom and sweep the ceiling and walls as well as they can handily and let the rest go, and be covered up by the whitewash. This is the cause of the whitewash cracking and peeling.

After sweeping down as well as possible fill the spray tank with clean water and go over the whole stable just as if you were whitewashing, a little more thoroughly if anything. You will understand what this is for, but the clean water gathers the dirt and dust and falls to the floor. In this way all the fine cobwebs and particles of chaff are brought to the floor and do not cause the rough surface seen on most whitewashing.

The lime should be run off at least three days or a week before using, and then carefully strained into the spray tank with good clean water. If these things are done, there is no reason why the sprayer should not work satisfactorily. The smallest thing will put a sprayer out of business, as everyone who has used one will testify.

While some believe in spraying the windows and all, and then cleaning up afterward, the best method is to do the particular places with a brush, making the sides of the windows and posts as white and smooth as possible, so they will reflect the light and shoot beams all over the stable.

The common fault of most new whitewash is that it rubs off and soils the clothes and makes things generally disagreeable. All this can be avoided by putting in as much common salt as the mixture will absorb. In order to be sure you get in no more than will be dissolved, put the salt in an old bran sack and drop the whole thing in. The salt also produces a harder and more glossy finish. Last but not least, be on the look-out for the spider and his horrid webs.

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J. C. INMAN.

POULTRY.

Fattening, Killing and Dressing Market Poultry.

Better methods of fattening, killing and dressing poultry should be encouraged on every farm where poultry is kept and sold to the consumers. Enormous are the losses sustained by farmers and poultrymen yearly through the marketing of poorly-finished, poorly-dressed and poorly-packed poultry. Prof. M. C. Herner covers the ground very well in an excellent article, which we reproduce from *The Farmer's Advocate* and *Home Journal*, Winnipeg, Man.:

At this time of the year there are enormous quantities of table poultry coming to our markets from our Canadian farms. A large percentage of this dressed poultry represents the raw unfinished product which is of an inferior quality and must be sold at a low price. The better class of poultry always commands a higher price, and the difference between the superior and inferior product is sufficiently wide to pay many times over for the labor, food, and special housing required to properly fatten and prepare the chickens for the market. It requires less grain to produce a pound of chicken than is required to produce a pound of any other kind of meat, and the price paid per pound is generally higher than that paid for beef, pork or mutton. The equipment required to fatten chickens for the market is so small and cheap as to require but little mention. This can always be obtained at first cost on a farm, making the production of table poultry a very profitable source of revenue on our farms.

It may almost seem like a waste of time to write on this subject so often, and yet we are asked time and time again how to fatten poultry for the market, so we always come back to the same point and repeat in detail the information we have given at various times, which to us appears so old and time-worn, but information which to the farmer represents so many dollars and cents in the increased revenue from his farm.

It seldom pays to fatten the lighter breeds like the Leghorns, Minorcas, Hamburgs or Anconas for the market unless they are sold as broilers at the age of eight to twelve weeks. The heavier breeds, or commonly called the utility breeds, like the Rocks, Wyandottes, Orpingtons or Reds or their crosses, will give the best results when fattened for the market. Even

in these birds there will be found a wide variation in individual birds in their adaptability to lay on meat or make the desired gains. We often find a crate of chickens of one breed making excellent gains, while another crate of the same breed is making hardly any gains. The reason for this difference lies in the individuality of the birds.

There is a certain type of chicken we look for which seems to be specially adapted for producing economic gains. A chicken which has a good strong head, bright eye, a low, stout comb, a good wide and deep body with a short back, a breast-bone well covered with meat, short, stout legs well set under the body, will always make better gains than the chicken with a long narrow beak and head, a hollow face and a dull eye. These latter are always an indication of lack of vigor and vitality. With these are associated the narrow, shallow body, long back, poorly covered breast-bone and stilted legs. In order to get economic gains we must have vigor, constitution and vitality. In one experiment conducted a few years ago I found that it required twice as much grain to produce a pound of increase in weight in the low vitality chickens as in the high vitality chickens, which in itself is one of the strongest arguments we could have in favor of selecting nothing but strong, vigorous and healthy stock to breed from in the first place and then give the young stock proper care and attention so they can grow to be strong, vigorous and healthy roasters. If the parent stock is of the right type, and the chicks receive the right care and treatment during the summer season, then they should make economic gains during the growing season, and develop into strong, vigorous roasters that will finish out desirable market chickens after they have been in the fattening crates three weeks. Quick growth and early maturity, along with good size, is what we should aim for in our roaster production.

A large proportion of the ration should consist of oats in some form or other. Where a white-fleshed chicken is desired the cornmeal in the ration should not exceed 25 per cent. Such grains as oat middlings, ground buckwheat, along with milk, always have a tendency to produce the white-fleshed carcass. On the other hand, yellow cornmeal and beef scrap have a tendency to produce a yellow-fleshed chicken. The best results in fattening chickens can only be obtained by carefully studying the requirements of each crate of chickens, and feeding only in such quantities that the birds have a keen edge to their appetite throughout the entire fattening period. Once a chicken "in a fattening crate goes 'off its feed,'" it is a very difficult matter to get it back again to a normal appetite, so a little care and judgment in starting to fatten chickens as well as subsequent judicious feeding will mean a good deal towards producing a well-finished product.

Usually a fattening period of three weeks will give the most economic returns. If fattening for a longer period the effects of extreme close confinement will begin to tell on the health of the birds, and generally the gains in proportion to the amount of food consumed decrease very rapidly after the third week.

Before the chickens are killed for the market they should be starved at least 18 hours so that all the food will be digested and assimilated and the entrails be practically empty. If this is done there will be no danger of gases generating in the crop or intestines, due to fermentation, which would spoil the quality and the flavor of the meat. There are two methods of killing chickens which, while they may seem rather complicated at first, will, however, later on be found to be the most practical in every way. We cannot too strongly condemn the old-time practice of killing the chicken by cutting off the head, then scalding and plucking it, and afterwards removing the entrails and cutting off the legs. In many instances we have known birds to go on our markets killed and prepared in this way to be infected with one or more of our worst poultry diseases. We readily see that there is no guarantee in any way, shape or form to say that the bird was in a healthy condition, and furthermore the various parts of the carcass by which disease might be detected or determined have been removed, thereby leaving the consumer entirely at the mercy of the producer. It is a fact, although not so commonly known, that all diseases in poultry will show in the head of the bird, moreover the liver is the organ usually affected in the common diseases of poultry. Roup in all its forms always affects the head, and can readily be detected when present in the carcass dressed with the head on. Tuberculosis can generally be detected on the head and always shows in the liver. Blackhead is another disease affecting the liver. These three are the most common poultry diseases, and evidences of some one of them can be found in 90 per cent. of our farm flocks. These facts are sufficient to indicate why we so strongly advocate an improvement in

the method of killing and dressing poultry for the market. Where poultry is marketed under these conditions, the most rigorous Government inspection ever instituted can never hope to sufficiently safeguard the public against buying diseased birds.

The method of killing by bleeding and sticking probably commends itself more highly to some people than to others. By this method all the blood is drawn from the carcass by severing the jugular vein in the throat of the bird; the feathers are loosened by piercing the brain, and the bird is then dry plucked. A bird killed and plucked in this way will, if properly done, present a neat and attractive appearance and will remain fresh for a considerable length of time.

Where the killing is done by dislocating the neck, all the blood drains down into the dislocated portions of the neck and there congeals, giving that part of the carcass an unsightly, dark, bluish red appearance. Besides this the head of the carcass will also turn a bluish color after the bird has been killed a considerable length of time or when it takes a long time for the bird to reach the consumer. If the bird has been killed by bleeding and sticking, the head remains fresh and a bright red color much longer, and the neck presents the same tasty appearance as the rest of the carcass. The bird is dry plucked in this latter method of killing, the same as in the former method. Plucking should be commenced just as soon as the chicken has been killed and finished before the carcass begins to cool. Once the brain is pierced or the neck dislocated the bird is immediately rendered insensible to pain and plucking should be started right away. Pluck the large wing feathers first, then take the breast or the back, and always keep the hand full of feathers. Plucking goes a good deal easier this way and there is less danger of tearing the carcass. The bird should be hung up by its legs, tied to a stout cord on a rod. Some prefer to have the bird in the lap and pick it there. By keeping the hand well filled with feathers and twisting it slightly every time a handful is plucked, there will be very little danger of tearing the skin. All the feathers should be removed except those on the head and a few inches down the neck. Also leave the small feathers on the wings from the last joint to the tips. A small bunch may also be left on each hock. Be particular to remove all the pin-feathers, as nothing detracts from the appearance of a dressed bird more than a number of dark pin-feathers. The wings should be slipped forward and folded over above and backwards. All blood and dirt should be carefully washed off the head and feet, and the carcass then cooled and pressed into shape. By drawing the legs forward under the body and alongside the breast-bone on either side, the carcass will shape itself into a nice blocky form, which permits of easy packing into the boxes.

The packing cases can be made any size suitable to carry poultry in dozen lots. Before packing the case should be lined with glazed paper, and the head of each chicken should be wrapped in glazed paper as well. There are various ways of placing them in the case, but the neatest and most attractive case that I have ever opened they were placed in sideways. Of course, it goes without saying that a case of uniform carcasses will sell to better advantage than a motley lot. The color, size and finish of the lot will usually govern the price. Any birds having crooked breast-bones should be discarded. Select as to size, color, quality, and appearance, and grade accordingly, is the rule followed by all large poultry plants.

GARDEN & ORCHARD.

Celery Hints.

Editor, "The Farmer's Advocate":

In reply to Peter McArthur's query re celery, I give him my experience with pleasure. In the first place, the old barnyard is an ideal place in which to grow it. You cannot have the ground too rich, as celery is a gross feeder. With regard to some of it getting pithy, I have had trouble in that line, but have come to the conclusion that it is caused by inferior quality of seed. I have grown many varieties, and have best success with the (1) Paris Golden Self-bleaching, (2) New Columbia, (3) Daniels' Exhibition Pink. The last named is an English variety, and is a great success in any part of Canada where I have tried it. In buying the seed deal only with reliable firms, and get their very best; it pays. If paper is wrapped round each plant and tied before earthing up, although a tedious job, it helps to blanch and also keeps the dirt from getting into the hearts, and is a great saving of time in cleaning for home use, or market.

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