

when a good culture is added in proportion of 10 to 20 lbs. of culture to 100 lbs. of cream, and ripened at that temperature till the following morning when the churning is done; the cream should not exceed 40 degrees of acidity at this time. A culture of good flavor should be used, and great care should be taken in the making of it. All these vessels, as well as those used in the butter-making, should be washed thoroughly, and then passed through steam, or sterilized.

Use only very pure water; not too cold, else the butter will be too hard at the time of working and it will be necessary to break the grain of the butter to complete the work.

It is preferable to work the butter twice. After having added the salt to the butter, work it partly, then leave it for sixty minutes at least to give the salt time to dissolve; then finish the working and pack it immediately in boxes clean and of good quality.

An Example of Herd Grading.

The accompanying half-tone shows one of a pair of grade Holstein heifers in the herd of W. Edgar Watson, York Co., Ont., who, from his letter, we should judge to be an enterprising young dairy farmer, typical of a refreshingly large number of wideawake men, seeking an avenue to success along the way of better stock and up-to-date methods. We quote in part from Mr. Watson's letters.

"These heifers are half sisters, being sired by the same bull, and, as their records are exceptionally good, I consider they show the value of the pure-bred sire.

"The one illustrated as a two-year-old produced 11,150 lbs. of four per cent milk in her first lactation period, which at Toronto wholesale prices sold for \$185.00.

"The other one freshened at 22 months of age, and produced 10,350 lbs. of 3.8 per cent. milk, which at Toronto wholesale prices sold for \$172, and this in her first lactation period.

"The dams of the two heifers whose photographs I have sent, I got from home when I started. They were good individuals, but had never been tested as to the amount of milk they would give till I got them. They had been bred to a pure-bred Holstein bull whose dam had a record of 17,000 lbs. milk in one year, and dropped the two heifers in question. I weighed their milk, and each one exceeded 10,000 lbs. When the heifers freshened their milk was also weighed, each one exceeding the amount given by their dams, as mature cows, they being two-year-olds. I have never used anything but a pure-bred bull. I milk seven cows, a couple others being dry. My herd last year averaged 9,250 lbs., three of them being two-year-olds, but expect a higher average this year."

The new dairy barn at the Ontario Agricultural College, now under construction, is to be one of the best in America. It is 142 feet long and 40 feet wide. It will hold 50 head of milk cows tied in stalls facing the windows, the stalls being 3 feet 8 inches wide, and graded in length according to size of cows. The barn is of plank-frame construction. The new cement silo is eighteen feet in diameter and thirty feet high. At present the barn is far from complete, but with an abundance of light, the Rutherford system of ventilation, and every known device to ensure good health and economy of labor, this when finished will be one of the most sanitary and well-planned dairy barns yet built.

For the information of buttermakers and cheesemakers, and others interested in dairying, there has been printed a verbatim report of the proceedings of the Dominion conference of dairy officials and experts held at Ottawa early this year. Copies may be procured by applying to the Publications Branch of the Department of Agriculture, at Ottawa.

POULTRY.

The Last Lap in the Egg Race at Storrs.

The North American International Egg-laying Contest at Storrs, Conn., which began on Nov. 1st, 1911, is now on the last lap, and the Canadian pen of Beulah Farm Wyandottes are pushing the leaders, F. G. Yost's White Leghorns, hard for first place at the finish. In the 49th week the latter's pen laid 17 eggs and the Beulah pen 26, the total score up to that time being 1,035 for the Leghorns and 1,017 for the White Wyandottes. Only three out of the five Leghorns were laying, but all the Wyandottes were "on the job" still. Barron's English pen of White Leghorns made a strong score earlier in the year, but losing two birds they fell behind. However, the Canadian contingent from Hamilton, Ont., patriotically filled the breach, and may yet snatch the coveted trophy.

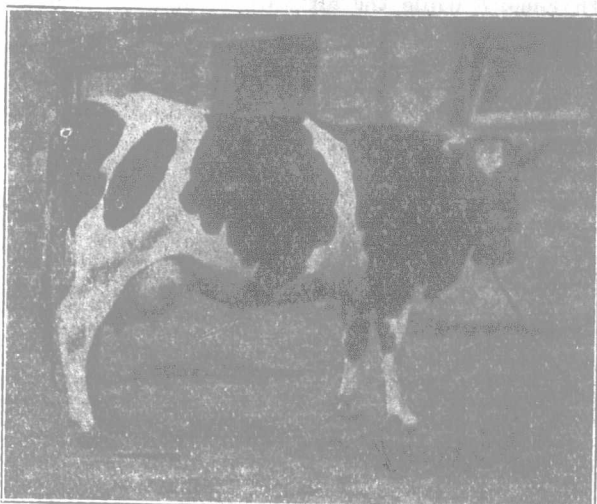
Care of Turkeys.

Editor "The Farmer's Advocate":

This has been a season altogether against turkey raising, and the fortunate owner of a good flock of turkeys will reap his reward when they are put on the market.

Young turkeys do best in warm, dry weather with plenty of sunshine, which this summer has been almost unknown, but poultry raisers in general are hoping for an open mild fall to counteract the effects of a cold, wet summer.

Flies, moths, spiders, etc., go largely to make up a turkey's ration, and when fine weather prevails and they have a good pasture to run over they are no trouble to their owner, and will get



Product of a Good Bull.

Grade Holstein heifer which produced 11,150 pounds of four-per-cent. milk in her first lactation period.

half their rations or more. In a season like this has been, however, they have to be confined to their coops so often that they are not so thrifty as we would like to see them, so that they are requiring extra care and careful feeding in order to bring them to maturity in good form.

At any time it is not policy to try to rear turkeys on rubbish, and at this season of the year they should be getting some good sound wheat in their ration.

If your turkeys have been properly cared for so far, and yet appear dull and sleepy without any apparent cause, catch one or two and examine



To the Feast.

them for lice. Lice are the direct cause of more disease among poultry of every kind than any other cause in existence, therefore, be on the lookout for them everywhere around the poultry premises. Should the turkeys be infected, go through the lot and dust them with insect powder. Repeat the process about three times in a week or ten days, after which if you have done the job properly very few of the pests will be left on the turkeys.

Diarrhoea is a complaint turkeys are very subject to, and if it is let run it will end up in

blackhead, which is fatal and incurable after a certain point. I always put a little muriatic acid in their drinking water, about twice a week in the fall. This is a good cure for diarrhoea and a preventive of blackhead.

Much of the trouble of illness in fowl of any kind can be avoided if proper precautions are taken, and an eye is kept on the appearance of the fowl every day. Smooth plumage is an indication of the good health of the bird. A turkey or other fowl with rough plumage promises trouble in the near future. When lice and mites are at work the feathers will be found sticking out all over the bird. When a fowl is badly affected with a contagious disease, it is a mistake to keep it alive. The best thing to do is to kill it, and either burn the body or bury it very deep at some distance from the fowl run. If let live, and measures are taken to cure it, the chances are that germs of the disease will be conveyed to other birds, and more will be affected and perhaps lost. The disease germs have a habit of finding their way to other fowl, unless every precaution is taken to prevent them.

A great many diseases can be prevented by providing the essentials to health, such as grit, charcoal and dry grains. Feeding sloppy feed will bring on diarrhoea, indigestion and very often liver trouble. Mash should always be fed in a dry, crumbly state. The difference between a sloppy mash and a crumbly one is the difference between sickness and health, and that is sufficient to warrant the feeding of nothing but a crumbly mash, or, better still, a dry one.

Carleton Co., Ont.

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Poultry Fattening.

Editor "The Farmer's Advocate":

Having been engaged in the marketing and fattening of poultry on up-to-date lines for the past twenty-two years, I will endeavor to give the farmer and average poultry producer a few practical hints on how my business has been carried on. In the first place, I might say that I have handled some thousands of chickens annually, and have met with constant success. The best breeds, I find, for marketing purposes are the following: Andalusians, Dorkings, Plymouth Rocks and Wyandottes, and, in purchasing for fattening purposes, would certainly give a higher price for birds of the above breeds.

In purchasing, considerable attention should be given to the condition of the fowls. It certainly does not pay to attempt to fatten sickly-looking, puny birds, as the aim is to bring into a marketable condition as quickly as possible, with as little attention and feeding as possible. The best time to commence operations is about the second week in May, as usually you can demand a higher price for birds that are placed in the fattening pen in this month. I prefer buying birds about 1½ lbs. in weight and not less than two or more than four months old.

I have tried both pen- and crate-feeding, also cramming, and would advise the pen-feeding method, as I find it reduces the labor to a minimum. I do not lay any hard and fast rule down to the variety of food given; neither to the quantity allowed each bird. I usually feed on bran, shorts, feed-flour and ground corn for the morning meal, and wheat, corn, and a little buckwheat occasionally, for the evening feed. I find two meals a day quite sufficient, with a liberal allowance of green food at mid-day.

I also have found fasting the birds for twelve hours to be the most satisfactory before commencing fattening operations. Some producers advise a twenty-four, or even a thirty-six hours' fast, before commencing, but I think, or at least my experience has proved, that this is apt to throw the birds backwards a little. Condiments or spices should never be employed.

By varying the above mentioned feeds, I find it costs me on an average about 8 cents for every pound of gain. I find one attendant (experienced) can properly care for some few hundred during the season, but would advise a beginner to handle not more than 150 during the first season. Usually I allow from four to six weeks for the process of fattening, and can always manage to obtain at least 25 per cent. more than the ruling market price for farm poultry.

From the above facts it will be seen that it certainly would pay the farmer and average producer to study the question of fattening more closely. In conclusion, I might say that one should always keep in mind the following:

The cleaner your poultry is picked the more they will realize on the market.

Do not send to private customers, as a rule they are more trouble than profit.

When you find a good, reliable salesman to send to keep him.

Always grade your goods, whether they be chickens or eggs. A bad or small article spoils ten good ones; one large one will not sell ten bad ones. Keep large, medium and small separately.

The best way for the ordinary farmer to mar-