



STOCK & DAIRY

COLOR FOR BUTTER.

The "Ogden Farmer" of the *Agriculturist* gives the following description of his process for giving butter the color that is most esteemed in the market.

"I have previously referred to the subject of coloring butter, and during the past five years have experimented with nearly every recipe that has come to my notice. I have now settled on a system which is so satisfactory—after nearly three winters' application of it in the coloring of over 3,000 lbs. of butter—that it is worth while to state it somewhat in detail. The question whether butter ought to be colored at all is one that may be left to the judgment of the maker. It is quite certain that butter of a good color sells for a better price than that which is as white as winter butter almost invariably is. I do not find that my customers object to artificial coloring, and I am sure they would criticize an uncolored article. No one objects to coloring with carrot juice, which is unreliable in the matter of taste, and grows more so as the spring approaches; but annatto is sometimes looked upon as a drug, and many hesitate to use it on this account. The annatto plant, which grows in the tropics; bears a prickly pod about the size of a horse-chestnut. In this are many seeds, of about the size and shape of the kernels of buckwheat, which are embedded in a reddish pulp. When the pod ripens the pulp dries and adheres to the seeds. The pulp removes from the seeds, is the annatto of commerce. The common means of preparation is by steeping in water and boiling to a paste and then drying; this is "basket annatto." Recently, Mr. G. de Cordova has developed a process for removing the pulp from the seeds by washing in cold water, separating the coloring matter from the liquid and drying it without the application of heat, and then pulverizing it, securing the coloring principle pure and of full strength. This is called "annattoine," and is the substance that we use, the form being not different from that in which it exists in the native pulp, which is used by the people of Brazil as a flavoring matter in cooking much as we use salt, which is as much an article of food and as little a 'drug' as is carrot juice. Annattoine is a natural vegetable product, artificially separated from its natural combination without being changed in character, and may be regarded as wholesome and even nutritious. It may be used in several ways. That which we have adopted (and which costs about 10 cents per 100 pounds, of butter) is according to the recipe of Messrs. White-man and Burrell, of Little Falls, N. Y., who are large dealers in the material. I first got the recipe from Willard's Dairy Husbandry, and afterwards in an improved form from themselves. It is as follows: 1. Dissolve one pound of the best potash and one half pound sal-soda in ten quarts of water, stirring occasionally, and allowing it to stand until well dissolved and until the impurities have all settled to the bottom of the vessel. Pour off all the clear liquor possible, let it settle again and pour off more, and repeat until all the sediment remains. 2. Dissolve one pound of annattoine in eight quarts of clear cold water and let it stand in a cool place from one to two days until perfectly dissolved, stirring occasionally and thoroughly. This mixture will ferment if too warm. 3. Mix the two liquids together and let the compost stand until the annattoine is perfectly united with the alkali and the liquid becomes clear, stirring occasionally. 4. Store in earthen jars, or if in glass keep in a dark place. 5. Immediately before churning shake the bottle, and put into the cream a large table-spoonful of the liquid for each gallon of cream, and stir it at once. More or less may be used, according to the depth of the color desired—more for butter to be sold fresh than for that which is to be salted down, as the tint becomes stronger with time."

EARLY MATERNITY AND TREATMENT OF COWS.

A writer in the *New-York Herald* holds that early maternity in a heifer enlarges the capacity of the milk of the milk-secreting organs to the advantage of the future cow. This is acknowledged. But the assertion which follows, that "unless this is done, and the habit of feeding well, so as to establish

a large secretion, be continued to maturity, the chance for a good flow of milk is lost and can never be recovered," demands attention.

I have proof to the contrary in my own experience with cows and this must be the case with the best dairymen generally who make it a practice to keep their cows well. These all must know the good effects of keeping a milk cow in good (uniform good) condition—never over-feeding, or so as to produce fat to any great extent, but a full supply of good nutritious feed, to keep the milk organs taxed to their utmost, whether the cow was an early milker or not. I have purchased cows at six and seven years of age, that were fair milkers: which in a few years doubled the amount of their milk, under the effect of good treatment—better considerably, than the cows were accustomed to. The food was choice and liberal, the housing in winter was the best, and no crowding or no molestation was allowed. Perfect comfort and a satisfied condition were secured. Here the capacity of the milk-secreting glands was either enlarged, or it had not before been sufficiently taxed. Which is it? I think it is the latter. Let me not be misunderstood. Those same cows, thus improved in their milk, might be early lactation. If the young mother, have still been better brought to calf long before she has attained her growth, is neglected or abused, and this is continued to maturity, there must, from necessity, be a lack, and a rather serious one. The animal will be much smaller; there will be less constitutional vigor; the pressure of the milk organs is lessened, and thus the habit of giving less milk formed. I remember cases of this kind; scrubby cows was the result. On the other hand, I have abundant evidence—and this is uniform—that a cow well treated from her birth up, pains being taken to get all the strength and growth, without excess of feed or fat, will be a better milker on account of early maternity. Size and strength will not suffer materially. Only see that there is good health and digestion, and a full supply of proper nutritious food. If the animal goes to pasture in the spring in good condition, grass, if abundant, will be sufficient as a summer feed. Otherwise, the animal being reduced when turned out to grass, there must be something additional, some concentrated food, to raise her up to the proper point. But even when a cow going to grass is in a high condition, a little grain fed may increase the flow or richness of the milk. Whether it be profitable, *per se*, to feed grain in summer, when there is an abundance of pasture, is another thing. But whether grass alone, or the aid required from something richer, be given, a full flow of milk and a high, strong, healthy condition of the animal without excess of feed or fat, should be rigidly insisted upon. With this treatment, maternity and the lactal drain will but be an incident in the life of the cow, not materially interfering with her constitutional vigor. The milk will be the earlier and more fully supplied; and the after effect in accordance.

It will thus be seen what the dairymen must keep in view—early maternity and good treatment, our common stock may be improved even to double its former capacity, as I have stated. The whole hinges on the care and treatment of the animal.

IRISH HEIFER BEEF.

A few words here as to Irish beef. That which comes from the dairy districts is of about the same quality as the same class of meat from similar regions in England and Scotland. But the finest beef in London, or on the face of the earth, is the Irish heifer beef, grown expressly for meat. Of very moderate proportions, small in bone, compact, delicate in handling, light in weight, solid and firm, fine in texture, sweet as a nut, and juicy as a pine. More than moderately rapid in maturity, weighing at thirty to thirty-six months, when ready for the shambles, from 10 to 12 cwt., or 1,120 to 1,344 lbs. These heifers, from weaning time forward, are fed upon grass, with occasionally a little linseed meal, as a hygiene. They are weaned at from three to four months; so soon as weaned, the cow is again set to breeding, and she, owing to the climate, is very prolific.

This heifer beef is grown exclusively on grass, and that the most delicious, juicy and succulent on the earth; a native grass, superior in every respect to our much-lauded blue or June grass of the Ohio valley. This

Irish beef never finds its way into the general market, but is a monopoly in the hands of two or three swell butchers, like Duval of Paris, and is supplied to the great clubs of Pall Mall, Piccadilly, etc. In the way of breed this Irish beef is the result of long years of careful in-and-in breeding, by intelligent, competent men, as wise in their day as Messrs. Booth, Bates, etc. The breed has no reputation out of Ireland, and it is very doubtful if it would succeed any where else. Some experiments made by crossing with Herefords and Devons proved a failure. The Emerald Isle is their home, and unlike its people, they do not thrive as "emigre."

—H. B. B., in *Live Stock Journal*.

MARKETING CATTLE.

There has one time or another been a great deal of both humane and common sense, and sound business principle violated in the treatment of cattle, from the time they leave the country to be sent to market, until they are disposed of. Sometimes they have been treated to an excessively large feed of corn, so as to heat them up and make them drink water excessively, thus giving the seller good weights when the animals are sold. Sometimes they have been well salted for the purpose of stimulating the drinking process. Sometimes cattle have arrived at our yards on Sunday, after a good long run on the cars, and have been ordered kept off from water on dry hay, and sometimes corn, until Monday morning, when they are expected to drink an amount of water that will weigh at least fifty or sixty pounds per head against the buyer. Quite a number of cattle, one time or another, that have been thus treated, have died in the yards, or before they reached the eastern market after being shipped from here.

All abuses of this kind need reformation, for the very good reason that it is both inhuman and impolitic to treat dumb animals in this way. Honesty is the best policy; every good cattle buyer knows at a glance just the condition that cattle are in for weighing, and he will always make his price accordingly—so that in nine cases out of ten, while the owner of cattle treated in the manner referred to may congratulate himself on having gained fifty to sixty pounds per head in the weight of his lot, the buyer has really taken the difference off in the price he has given, just as he ought to do in every case of the kind.

Cattle should always be fed regularly and fairly from the time they leave the country until they are slaughtered for consumption. Humane principles require this policy on the part of the owners, and it is requisite for keeping the meat of the animals in perfect health and in its normal, juicy condition for human food.—*Drovers' Journal*.

TO SWEETEN BUTTER FIRKINS.

Our readers who are engaged in the manufacture of butter often experience considerable difficulty in keeping the firkins sweet. A failure to accomplish this very frequently entails upon the manufacturer a severe loss, and to them we present the following information concerning this matter, which will be found of considerable benefit:

Before packing butter in new firkins, put them out of doors in the vicinity of the well, fill them with water, and throw in a few handfuls of salt. Let them stand three or four days, and change the water once during that time. Butter firkins should be made of white oak, and this process effectually takes out the acid contained in that wood, and makes the firkin sweet. If the butter is well made and rightly packed, it will keep good all summer, even if the firkin be kept in store above ground. To cleanse old firkins in which butter has been packed and left exposed some time to the air, fill with sour milk and leave standing twenty-four hours; then wash clean and scald with brine. This makes them as good as new.—*Colonial Farmer*.

HEMP SEED TO PREVENT ABORTION.

Mr. W. R. Duncan, a well-known and reliable breeder of Shorthorns, of McLean Co., Ill., writes to the *National Live Stock Journal* in relation to the hemp-seed remedy, as follows:

Nothing has ever been used by the scientific men of the world so immediate in its effect, or so reliable. By the use of it I have not only broken up an established habit time and again, but have arrested its

progress and relieved the patient after our best scientific men had decided that it could not be done with any remedy.

I have done so after there was an apparent rupture of the membranes, and quite a discharge of the liquor amnii. The use of it as a remedy has been so successful that I have never made one failure in twenty years. I could, doubtless, astonish many persons by giving names and the particulars of cases, but that is unnecessary. Facts are quite sufficient, as I am not aiming at making a fortune out of the remedy. With such females as can make complaint in time, I only use the remedy at such times as may be necessary; but with such as cannot, I feed about one pint of the clean seed every week. In others I feed either all at once, or at times, as may be convenient, for one or two months after the aborting period, or until the time of delivery, keeping the patient as quiet as can be done with convenience. With this remedy I have not only prevented the abortion, but have, in every instance, seen the subject of the effort, so to do, surrounded by a healthy, living offspring.

CHEESE FACTORIES IN CANADA.

Cheese factories in Canada are said to be on the increase. There is no reason why many districts in the Provinces should not compete successfully with the dairy districts of the United States. There is no danger of glutting the market. The *Western Rural* has always taken the ground, and does yet, that increased production always produces increased consumption, if the commodity only be one of general value to the community.

Cheese ought to be a common article of food, of universal use, fully as much so as butter, and will be, when the value of cheese as food comes to be properly appreciated. Therefore, we say to our Canadian neighbours, Go ahead; produce all the first-class cheese and butter you can, and help to drive out of the market some of the inferior produce that vitiates the taste when it does not produce disgust.—*Western Rural*.

MAKING SHEEP PROFITABLE.

All flock masters have in view the object of making the flock pay, but each goes about it in an entirely different way. One cares well for the flock, and makes them as comfortable as may be at all times; another lets them take care of themselves. These last are usually looking for some better breeds, and imagine their sheep are "run out," or they have had them too long. I have a great deal of sympathy for a flock of sheep in this situation. They are placed very much as the Israelites of old were when commanded to make brick without straw; much is expected from them and very little done for them.

The probabilities are that one-half of the sheep kept in this country are cared for in this slipshod manner. Their owners consider them poor property, and neglect them in every possible way, only waiting for a chance to sell, which they do not get, as their sheep are not in a condition to attract buyers. When the cold fall rains and snows come, the owners know them to be severe storms, but imagine the sheep can stand it. The consequence is, that when winter sets in the sheep are low in flesh; they are not thought to be doing well, but the owners expect to have some early lambs to sell at a good price, to make up the loss for all former bad treatment and neglect. When the early lambs appear, many ewes have twins; none have nourishment enough for one lamb, much less two; many die from want of shelter. By the time grass comes, the lambs are stunted, and the ewes are poor beyond description; on many the wool is entirely off the belly and neck. Shearing time arrives; the average is from two and one-half to three pounds of inferior wool, the lambs are not fit for the butcher, and the profits from the early lambs vanish. These farmers naturally conclude that the sheep business is unprofitable; they think dairying would pay better. This is the way to make the flock not pay.

The other class of flock masters keep as many sheep (or a few less) as they have good feed for in summer, and comfortable accommodations in winter. If the aim is to breed pure bred stock, they select the best specimens of the breed to be found, whether long or fine wool, weeding out all such as do not come up to the standard of what may be called excellent. If, on the other hand, it is thought best to breed a practical sheep, one for wool and mutton, and lambs for the butcher, they select from the best natives in the country, ewes of good age, say from two to three years; avoiding all those disposed to be bare of wool about the belly, face or tail; then crossing them with a pure bred long-wooled ram, even if he costs from \$35 to \$50. I know of nothing better than a Cotswold, as the lambs will have almost twice the amount of wool that their dams had, and carcasses in proportion, and the second cross in the same direction will produce stock that, to the