

problem might be finally solved, perhaps, by prohibiting both parties from using such artificial color; but what would the dairymaids say to that? That the margarine people have no moral right or claim to use it may be taken as clear enough; but then, what about the right of the buttermakers? There can be but little doubt that Parliament would far more easily see its way to prohibiting the use of artificial color in margarine if only the use of it in butter did not stand in the way. Are the buttermakers prepared to facilitate the decision of Parliament by voluntarily relinquishing the practice many of them have followed so long? Much, very much, as it seems to me, depends on some such solution of the difficulty.—J. P. Sheldon, in *Live Stock Journal*, London, England.

Butter Test at the Royal Jersey Show.

The following is a summary of the report of the judge in the test at the annual show at St. Heliers, May 10th, 1900:

In reporting the result of the eighth annual butter test conducted under the auspices of the English Jersey Cattle Society, at the Royal Jersey Agricultural Society's Show at St. Heliers, it is satisfactory to state that the test has not only exceeded in the number of entries all former competitions on the island, but the cows tested have shown a marked improvement in general excellence, as out of fifty-five entries there were fifty-three tested, thirty-nine of which were awarded certificates of merit.

The cattle were stripped on Tuesday evening, May 8th, at six o'clock, the milk of the next twenty-four hours being taken for the test.

Separation commenced at seven o'clock on Wednesday evening, and the fifty-three lots of milk were finished by 8.25.

Churning commenced at 6.25 on Thursday morning, and the awards were published by 3.15. The averages of the cattle tested are as follows, from which it will be seen that, when the long period of lactation is taken into consideration, the cattle brought forward on this occasion were better than at previous shows.

| | Days in milk. | Yield of milk. | | Yield of butter. | | Ratio, lb. milk to lb. butter. | Points. |
|-------------------------------|---------------|----------------|---------|------------------|---------|--------------------------------|---------|
| | | lb. oz. | lb. oz. | lb. oz. | lb. oz. | | |
| 12 prizewinners averaged..... | 148 | 31 11 | 1 13 | 16.68 | 40.55 | | |
| 53 cows tested averaged..... | 142 | 30 5 | 1 12 | 17.06 | 38.45 | | |

The gold medal and special butter prize were awarded to Mr. J. Hamon's Sweet Bread; test 32 lbs. 14 oz. milk, 2 lbs. 7 oz. butter, 165 days in milk. Ratio, viz., lb. milk to lb. butter, 13.48. Second, the silver medal, to Mr. R. Williams' Fancy. Third, the bronze medal, to Mr. C. Mourant's Lucy 8th. Thirty-nine certificates of merit were awarded. Fifty-three animals averaged 30 lbs. 5 oz. milk, 1 lb. 12 oz. butter, 142 days after calving.

The largest yield in the test was 47 lbs. 8 oz. of milk, and 2 lbs. 3 oz. butter, from a 7-year-old cow 84 days in milk. A 6-year-old cow, 74 days in milk, gave 41 lbs. 14 oz. milk and 2 lbs. 8 oz. butter in the 24 hours. The record speaks well for the "dairy queen."

Bloody Milk: its Cause and Cure.

Cows frequently give milk tinged with blood. Occasionally this yield of bloody milk is due to constitutional weakness; but in the majority of cases it is the result of some injury which causes a laceration or rupture of the blood vessels of the udder, and thus leads to an effusion of their contents into the sacs in which the milk is secreted, or in which it is stored after secretion. In cases of this kind no serious results need be apprehended, as quite a trifling injury often suffices to bring about the attack, and repair of the parts is equally simple, and is generally effected by nature in the course of a few days. A good dressing for the udders of cows giving milk of this description consists of an ointment made up of equal parts of camphor ointment and belladonna ointment, which should be briskly rubbed into whatever quarter of the udder the bloody milk is coming from. As a preliminary to the application of this ointment, the udder should be well fomented and then rubbed dry before the dressing is used.—*Farmer and Stock-breeder*.

Women in the Dairy.

The *Practical Dairyman* of Indiana, in reproducing from the *FARMER'S ADVOCATE* an article on the dairy cow and her keep and care, adds:—"It was written by a woman (Miss Laura Rose), and it shows that she is versed in dairy matters. The time will come when woman will become more prominent in this business than she has ever been. A number of the wives of farmers in Sangamon County, Illinois, have organized a Women's Butter-making Association, which meets monthly in all-day sessions to enjoy social features and to advance the dairy interests of the county. Two butter fairs have been held, and the farmers' wives around Springfield are coming to the forefront as O. K. artists in the practical science of making gilt-edge butter."

There were operated in the United States, during the season just ended, 31 beet sugar factories, with a total capacity of 19,150 tons, and six additional ones with a capacity of 3,100 tons are building for next season.

The Apple Packing Bill.

In the last issue of the *FARMER'S ADVOCATE* we published a draft of the Bill regarding the packing of apples and pears for export introduced by Hon. Mr. Fisher, Minister of Agriculture, in the Canadian House of Commons, and which has been subjected to considerable discussion there. In this connection we give below a copy of a letter addressed to the Minister by Mr. J. M. Shuttleworth, of Brantford, Ont., who has had an extensive experience as a fruit exporter. Mr. Shuttleworth considers that compulsory inspection is impracticable, and would be injurious to the apple trade. He thinks that, generally speaking, it is not the exporter who falsely packs, but the men sent out to do the work, and they do it through being bribed or to satisfy those whose fruit is being packed. Our own experience and observation is that the packing gangs appear to work according to some general directions from their employers, because when the demand is keen and prices good they aim to get more barrels filled, but when the reverse conditions prevail they cull unmercifully. Now, we do not object, nor should any reasonable fruit-grower, to proper culling and grading, but when an exporter throws out everything but prime fruit, he should be prepared to pay well for what he takes, because there is no doubt he will be making handsome profits upon it, and the farmer can realize little or nothing upon a lot of culls. Following is a copy of Mr. Shuttleworth's letter and the Bill he proposes:

Brantford, May 15th, 1900.

The Hon. Sydney Fisher,
Minister of Agriculture,
Ottawa, Ont.:

DEAR SIR,—I assume that the whole intent of Bill No. 127, 1900, is to prevent as well as punish fraud, and also to preserve the reputation of Canadian products in foreign markets.

My contention is that Canadian consumers are as much entitled to protection from fraud as are the foreign consumers, and therefore the Bill should be made to cover all fruits. It is a notorious fact that peaches, pears, plums, grapes, etc., packed in baskets and other packages, are quite as fraudulently packed as are apples and pears for export.

The conditions incidental to the export apple trade are peculiar to it. The short time in which the fruit must be packed, the delays that unfavorable weather entail, the wide area, over which a large operator has to work, the short time in which employment can be given the bulk of the men employed, make the export apple trade very difficult to handle. A good number of the men employed cannot be looked after the way they could be under other conditions, and while an operator may have contracted for nothing but first class fruit, yet he often finds out, when it is too late, that his packer and the orchardist have contrived to make him pay a good price for trash, and ruined the reputation of his brand at the same time.

In the enclosed draft I have used for example only, and to make my meaning clear, the form and terms of the Bill you have before the House.

Dealing in detail with it, I shall endeavor to explain myself more fully.

Clause 1. The branding of the full name and address of the owner being compulsory, will make him keep track of the man who packs the fruit, for his own protection. Where the faced or shown end of the package is not a fair representation of the whole contents of such package, the intention to defraud is evident, but if it is a fair representation, then it is evident that the person who did the packing has had no intention to do wrong, but has simply erred in his judgment of what the grade really is or should be.

Clause 2 will be some safeguard for the consumers, although one packer's No. 1 Canadian may be as good as another's A No. 1.

Clauses 3 and 4. The varying climatic conditions prevent the use of a fixed standard, either in size or color, that could be complied with one year with another. There must, therefore, be some leeway allowed, and while they may not be as definite as could be desired, yet anything more definite is impossible.

Clause 5. This will permit a producer to sell what lower grade fruit he may have at its market value.

Clause 6. Placing the onus of proof upon the person whose name is on the package will more likely insure conviction where fraud has been perpetrated; at the same time he will not undeservedly be punished for another's wrongdoing.

Respectfully yours,
J. M. SHUTTLEWORTH.

AN ACT FOR THE PREVENTION OF FRAUD IN THE PACKING AND GRADING OF FRUIT.

1. That any person who by himself, or through the agency of another, packs, or causes to be packed, apples, pears, or any other fruit, and offers such for sale himself, or through the agency of another, or ships such for export, shall mark or brand, or cause to be marked or branded, in a plain and indelible manner, with the initial or initials of his christian name and full surname and address, and also mark, or cause to be marked, the grade of fruit on each and every package containing such fruit, and that the face or shown part of the package shall be a fair representation of the whole contents of such package.

2. The designation of the grades of fruit shall be A No. 1 Canadian, No. 1 Canadian, and No. 2 Canadian.

3. A No. 1 Canadian shall consist of well-grown specimens of such fruits, sound, of nearly uniform size, of good color, and

of normal shape and size for the variety named, and not less than ninety per cent. free from scab, worm holes or other defects.

4. No. 1 Canadian shall consist of well-grown specimens of such fruits, sound, of nearly uniform size, of fair color and normal shape for the variety named, and not less than seventy-five per cent. free from scab, worm holes or other defects.

5. No. 2 Canadian may consist of fruit unsuitable for grading as A No. 1 or No. 1 Canadian, but must be sound and mature fruit.

6. Where fraudulent packing of fruit has been done, it shall be the duty of the person whose name is on the fraudulently packed package or packages, provided the fruit has not been packed by himself, to supply the inspectors or other authorities with the name and address of the agent or person who has been guilty of such fraudulent packing.

7. The penalty for fraudulent packing or marking shall be as follows:

Caring for Transplanted Trees.

Enough cannot be said in favor of mulching trees as soon as they are planted. It is all-important to protect the roots from the effect of evaporation for at least six months after planting. The small fibers must be allowed to form and get a good hold of the soil, and large feeding roots must be able to reach out, so as to make sure of a supply of food and drink for the growth that takes place. It is not enough to pour on water from above. This, of course, must be done in very dry weather, but an irregular supply of this sort does not meet the demands of the roots. Cover the soil so far as it has been distributed by the spade with a layer of three or four inches of coal ashes, or sawdust, or loose strawy manure. Avoid using rich and raw manure. Tanbark is in some cases available, and where nothing else can be obtained, use weeds, fresh-cut hay or clippings from the lawn. This application will retain the moisture in the soil, and, what is equally important, will keep the roots at an equalized temperature. Without a mulch, the more you pour on water the more liable the ground is to baking and becoming impervious to a natural circulation of moisture. Above all, avoid sprinkling the soil with a slight supply of water. In addition to the foregoing, pinch off buds that start out of place, and any superfluous shoots or limbs so as to send the supply of moisture and plant-food to the part of the plant where it is most needed.

Garden Tillage.

The study of soil conditions with a view of devising means to promote perfect and rapid growth is a broad problem, and one that by reason of the widely varying conditions must largely be worked out separately for each locality. Frequency of culture, it is safe to say, is more necessary than depth, and yet impaction, frequency of rains, and the nature of the soil itself, all aid one in determining when deep stirring should accompany surface culture. If the soil is moist and it is impossible to go upon it except when it is unseasonably so, then deep stirring is generally needed. Even when the ground is dry, if there is frequent cultivation and much tramping between the rows, it is often so impacted that deep stirring becomes necessary.

Mulching the Berry Patch.

If you have a berry patch, you, of course, desire lots of fine, large berries. But you cannot expect these if you permit the weeds to grow among the bushes. It is a tiresome job to keep them out by pulling. The easiest way to keep the patch clean is by mulching. Mulching has other advantages, as it keeps the ground moist, and when the bushes are loaded with fruit and droop, the berries are kept clean. Shredded fodder makes a good mulch, as it contains no weed seeds; clean wheat straw is the next best thing. Apply it early in the season before the weeds grow, and, if possible, before a rain, for when once wet it will not blow off. Be sure to get it well around the plants or the weeds will grow; also be sure to get it thick enough. I am sure you will find it a great thing to keep weeds down and retain moisture.—L. Pauls, in *P. Farmer*.

A picture of three Royal past presidents of the Royal Agricultural Society of England, namely, Her Majesty the Queen, H. R. H. the Prince of Wales, and H. R. H. the Duke of York, has recently been painted by Mr. Orchardson, R. A., and will be placed in the offices of the Society in Hanover Square, London. The artist has introduced a portrait of the little Prince Edward of York as a coming president, thereby representing the four generations. The canvas represents Her Majesty the Queen seated in a corridor of Windsor Castle. Little Prince Edward (his steps guided by his father, the Duke of York) is approaching Her Majesty, carrying a bouquet of flowers, whilst the Prince of Wales looks on at the scene.

Prof. F. H. King, of the Wisconsin Agricultural College, Madison, Wis., has in preparation a bulletin giving the results of his latest investigations of silos and silage and his ideas and views of how to best construct the silo. The bulletin, which will come from the press in five or six weeks, will be profusely illustrated. Prof. Henry states that he will gladly supply a copy of this bulletin free of charge to any resident of the State, and also to any non-residents who will send in their application and address, accompanying the same with a two-cent stamp to pay cost of mailing.