

An Australian Dairy Act.

Apropos of Hon. Mr. Monteith's Act in the Ontario Legislature, providing for the appointment of sanitary inspectors for cheese and butter factories, under direct supervision of the Department of Agriculture, and not in any way connected with the Dairy Association instructors, interest attaches to the Milk and Dairy Supervision Act of Victoria, Australia, passed by the Legislature in 1905. Provision is made for the appointment of supervisors and veterinary officers, and their duties are clearly defined. Thus it is enacted that the duty of supervisors shall be:

- To become personally acquainted, as far as possible, with every owner of a dairy farm, dairy or factory, and the conditions of every dairy farm, dairy, and factory in his district;
- to confer with or advise such owner on matters connected with his farm, animals, premises, utensils, milk, and dairy produce, when requested to do so, or when instructed to do so by the authority;
- to inspect and examine all premises, utensils and appurtenances, and also all animals and their food and water supply, and also all dairy produce at such dairy farm, dairy or factory, in such manner and by such means as may be prescribed;
- to make such other inspection, examination, inquiry or investigation as may from time to time be directed by the authority; and
- to report to the authority the results of inspections in such form as the authority may require, or as may be prescribed.

Each dairyman, of whatever description, must be licensed annually, and will require to pay the following fees:

For a dairy farm within a milk area, such sum as may be prescribed, but not exceeding 6d. per cow; for a dairy farm not within a milk area, such sum as may be prescribed, but not exceeding 6d. per cow; for a dairy or factory, such sum as may be prescribed, but not exceeding, in each case, £2; for each creamery attached to factory, such sum as may be prescribed, but not exceeding 5s. These fees will be applied to the cost of administering the Act.

The powers given to the supervisors are very full, and, under the right men, will ensure a perfectly pure milk supply. We doubt, however, if properly-qualified men can be obtained for the stipulated salary of £150 per annum. An obvious flaw in the measure is the absence of an advisory board to act with the minister who has supreme powers. He may be totally ignorant of dairy matters.

Progress of Victoria Dairying.

The production of butter for the English market has become one of the most important branches of Victorian agriculture. The manufacturing and marketing of the product is carried out almost entirely on a co-operative basis. Two hundred co-operative factories are scattered through all parts of the State, the largest of them producing from thirty to forty tons of butter a week in the height of the season. Dairy farming has the great advantage of bringing in a cash return to the farmer week by week, and the southern and western districts, where this industry is chiefly carried on, are the most prosperous and progressive parts of Victoria. The freehold of a good dairy farm often realizes from £15 to £20 per acre, and tenants pay correspondingly high rents. Returns of £10 per cow per annum are not infrequently met with, and, in addition, calves and pigs, which are fed on the skim milk, very materially increase the profits. Two systems of dealing with the milk are adopted. In the one, the milk is carted to the factory or creamery, and the cream separated by the machines belonging to the company, the farmer carting back the corresponding amount of skim milk. The other system which is in vogue in the more thinly-populated districts, is that of the "home separator." The milk is separated at the farm immediately after milking, and the cream sent to the factory every day or two, according to the size of the farm. The number of dairy cows in Victoria has increased by thirty-three per cent. during the past five years. The butter industry has been steadily fostered by the Government. The produce is received into the Government Cool Stores in Melbourne, where it is graded and frozen ready for export. Recently the State has concluded a contract with one of the chief shipping companies, securing regular despatch, a minimum temperature, and a low rate of freight for the London market. The last annual returns given out put the value of the milk products of Victoria at £3,481,408. This does not include pork or veal-ers.

Thanks the Knife O. K.

Dear Sirs,—Thanks very much for the knife, which I received all right. It is a fine one, and just like the paper—all O. K. Yours truly,
Montreal, Que. JOHN SUTCLIFFE.

Reliable Testing Apparatus.

The last-issued report of the Chemist to the New Zealand Agricultural Department discloses the fact that the testing of glassware by the Department during the year under review, resulted in a higher percentage of condemned pieces than for six years past. Also the percentage of dairy thermometers condemned as inaccurate was again large. The result shows the necessity for maintaining this branch of work undertaken by the Department. The work is highly appreciated by the dairy producers, and honest dealers in the ware also regard it favorably.

Danish Butter Quotations.

A new quotation committee has been appointed at Copenhagen, to consider the question of putting the butter quotation upon a satisfactory basis. It seems a curious thing that the Danish committee should themselves arrogate the right to fix the price for the Danish butter, which in reality should be fixed by the sellers in England. There are hundreds of shops in this country where Danish butter is sold, and the local supply and demand are not taken into consideration by the Danish committee at all. Whether the new arrangement will work better than the old remains to be seen, but the vagaries of the quotation as it has been made hitherto, amount to something like a scandal.—[British Creamery Journal.]

GARDEN ORCHARD.

Cultivation and Spraying.

Editor "The Farmer's Advocate":

In order to obtain the best results from an apple orchard, it is necessary that the fruit-grower should study the requirements of his particular orchard, and not conclude that because his neighbor has received good results from certain care and fertilizers that he should do exactly the same. The care of every orchard must be based upon the conditions of the trees and soil.

As our orchard is planted on several different kinds of soil, we find that it is impossible for us to obtain the same results from all without as many different kinds of treatment as we have soils. Part of our orchard is situated on a rich clay loam, with a deep, porous subsoil. Constant cultivation there produces great wood growth and few fruit spurs; but by weekly cultivation until about the first of June, which gives a good wood growth, and then sowing oats or clover, we check the growth, thus forcing the sap to the fruit spurs and buds, forming blossoms for the next season. In fact, an apple orchard so situated will give better results in soil, with a free application of barnyard manure, and about one-half bushel of unleached ashes per tree, than it will by constant cultivation.

Another part is planted on a clay hillside, where constant cultivation until fall and free application of fertilizers are necessary to give the trees a good start. This treatment we continued until the trees were producing generously of fruit, but found that we had to discontinue this treatment, as every rainstorm washed down considerable loose soil, which would eventually leave the roots bare of soil, so seeded it down with clover mulch, with barnyard manure, and applied about half a bushel of ashes per tree. The trees have responded generously to this treatment, and for the last ten or twelve years have proven quite as profitable as other portions of the orchard more favorably situated.

Judicious pruning is also very important in the care of the orchard, but I would rather see a tree unpruned, as nature made it, than to see it butchered, as many growers think they must do in order to get proper results. By pruning, we mean the thinning out of small branches from the outside of the tree, and cutting out all branches that cross or interfere, so as to allow the free circulation of air and sunshine, yet leaving plenty of limbs covered with fruit spurs to carry a good crop of apples.

The fruit spurs should be evenly distributed from the outer twigs, along the branches as nearly as possible to the trunk of the tree, so that the fruit will be properly distributed and balanced all the way through the tree. It does not take a large tree so pruned to hold seven or eight barrels, but it will take a big tree to carry four or five barrels, pruned according to the common system, which requires all the fruit to grow on a few small branches at the end of long limbs, where it is played havoc upon by the wind.

With us, spraying is an absolute necessity, and we may cultivate, fertilize and prune just as much as we like, but if we do not spray intelligently we will have little or no results. The man who neglects to spray may be likened unto the man who plants his potatoes with all care, cultivates and hoes continuously, but neglects to fight bugs and blight, with the result that these destroy the results of his other work; the more he works, the better pasture fields he produces for the bugs.

I have seen the most marked results from spraying, and have been surprised to find, in my recent tour among the fruit-growers of Ontario, that not ten per cent. spray as they should. Our first application of spray, composed of two pounds of sulphate of copper dissolved in forty gallons of water, is applied just before the buds open. The second spraying is given just before the blossoms open. This is composed of four pounds of sulphate of copper, six pounds of fresh-slacked lime, and four ounces of Paris green, in forty gallons of water. This solution is commonly called the Bordeaux mixture, with Paris green. The first two sprayings are for the destruction of fungous spores and bud-eating insects. The third spraying, which is again the Bordeaux mixture and Paris green, is applied just as soon as the blossoms have fallen. This application is also for the destruction of fungous growth, but principally for the codling moth. It will be noticed that the little apple points upward, with the calyx wide open. Now, we want to let the fine, mist-like spray fall upon the open calyx, dry there, and in a few days, with the natural process of growth, it will be enclosed in the blossom end or pocket-like enclosure called the calyx, and as nearly all the first brood of codling moth enter the apple through the blossom end, their first dinner is a poisonous one, which destroys them. The next sprayings are made at intervals of about ten days or two weeks.

Spraying should always be done with the wind; when the wind changes, spray the other side of the row, stopping at least twice on each side. The proper application of the above mixture has done wonders with us and others, restoring the most infested trees to beautiful, luxuriant foliage, and producing fruit practically free from spot or worm.

D. JOHNSON,
President Forest Fruit-growers' and Forwarding Association.

[The above, from one of the most successful apple-growers in Ontario, should impress upon every reader the great importance of cultivation, pruning, spraying and general orchard care. It is a far cry, though, from the Johnson orchard, with its rich, heavily fertilized soil, from which no crop but apples is harvested, to the pastured and hay- or grain-cropped orchards seen throughout the country. It would be quite a while till many of these would suffer from too much wood growth, be the cultivation ever so thorough. What they need is a chance for more and healthier growth, and to this end they should be plowed up early in May and thoroughly cultivated throughout the summer.—Ed.]

Trees and grass do not go well together. Get the sod out of the orchard; no crop but apples in it this year.

With a wheel hoe and a cultivator a garden can be kept clean and thrifty almost as easily as a cornfield.

POULTRY.

Shade for Show Poultry.

If birds are required for show purposes, even for a local show, shade is an absolute necessity for white and buff breeds. It will not do to shade them for a month previous to showing; they must be kept from rain and strong sunshine from the time they start growing their adult plumage. We give this warning, as, from time to time, judges meet with birds that are excellent in every respect save that their plumage had been ruined by exposure. Exhibition breeders of note adopt most elaborate precautions to guard against the weather, but for ordinary folk the shelter provided by a belt of trees, or by a shrubbery, or a plantation of sunflowers will be ample, provided it is properly fenced so as to keep the birds there all day. If necessary, they can be let loose to forage for a couple of hours after the great glare of the sun is over in the evening. An orchard is an ideal place for pullets that want a little extra care in this way. Shade is not strictly necessary for black or dark-colored birds, although it must be remembered that birds having white lobes, like Minorcas, are all the better for it, and wherever such a shady spot is available it should be used. Again, white birds are easily ruined, from a show point of view, by the too liberal use of tonics containing iron, or by feeding largely on corn or its products. Both tonic and corn are valuable in moderation, especially with yellow-legged varieties; but the mischief is easily done, and there is a case of the cure being worse than the disease. It has been said that "perfection consists of trifles," and certain it is that the winning of prizes usually falls to the lot of those who are careful in little things.—[Farmer's Gazette.]

A writer in L'Acclimatation, discussing the sex of hens' eggs, claims that from eggs of pointed shape cocks will be hatched, and from the round eggs hens. What have our readers observed on this point?