

Mistakes in Judging Dairy Cows.

Prof. Wilson, before his class in agriculture at Edinburgh, makes the following allusion to the system of judging dairy cows at the Royal Show at Shrewsbury.—

There were a great many cows entered, and they were judged by the ordinary mode of judging. Well, sixty of those cows were turned over from the ordinary method of judging to a scientific test of how far this judgment was correct. The first prize under this test was given to a Shorthorn, but not a thoroughbred one, eight years old, and in her sixth month of milking. She milked 51½ lbs., and the milk was so rich that it contained 12.51 per cent. of solids, and 3.26 per cent. of butter fat. They gave her 99.95 points—100 representing perfection. Curiously enough, this cow had been passed totally unnoticed by the judges. The second prize also went to a Shorthorn, not thoroughbred, five years old, and only one month in milk. She milked 44 lbs., and obtained 94.39 points. Now, in regard to the first of those cows, they could assume that she was giving an average, at all events, of five gallons of milk per day throughout the whole period of her lactation—or, say, 1,500 gallons a year. He ventured to say that the average produce of cows on dairy farms was not up to 500 gallons a year. Now, if they could get a cow that would give 1,500 gallons, why stick to cows that gave only 500? The reason was that they had relied too much upon what was called the judgment of men whose judgment could not be relied upon; and they were losing enormously every year for want of applying precise methods of investigation and analysis. The next cow was a thoroughbred Shorthorn, six years old, and four months in milk. She gave 24 lbs., and received 76.94 points. A twelve-year-old pure bred Shorthorn obtained 73.39 points. A Guernsey cow, eight months in milk, gave 20½ lbs., the quality being so good that it yielded 15 per cent. of solids, of which 6.28 was butter fat. A Jersey cow gave 36 lbs., but her milk was not so rich. The Guernsey had been placed second by the judges; the Jersey, which had obtained 81.42 points, had been unnoticed. A Welsh cow gave 46 lbs., and obtained 85.66 points. She had got the first prize in her class from the judges. There were no pure Ayrshires tested, but there was a cross between Ayrshire and Shorthorn. A six-year-old, one month in milk, gave 37.34 lbs., and obtained 81.73 points. A Dutch cow, which had been a prize-taker, and was an extraordinary cow for development of udder, gave 52 lbs.; but the quality was so wretched that any one selling it might have got fined for adulteration. On the whole, those trials brought out the enormous difference that exists between the milk producing powers of animals of different breeds, and even of the same breed, fed and kept under exactly the same conditions.

The prevailing sentiment of the late convention of the New York State Dairymen's Association seemed to favor a reduction in cost of the production of dairy goods, rather than an increase in the price of the products to be sold. The means suggested for accomplishing this result were, a better protection of stock against cold; increasing the production of feed from ground now occupied, by more thorough cultivation and higher manuring; a better selection of milking stock, and more liberal feeding.

Poultry.**The Exhibition.**

BY L. G. JARVIS.

The seventh annual exhibition of the Poultry Association of Ontario, held at Guelph, from the 20th to the 24th of January, was the most successful yet held under its auspices. The display of poultry and pigeons has not been excelled at any previous show. The exhibition was held in the large and commodious drill shed. It also being well lighted, made it still more suitable for the purpose. The birds were arranged in tiers around the building and tiers facing each side in the centre. Every attention possible was paid to the comfort of the birds, and at the close of the exhibition they appeared to be in better health than at the commencement. The President, Mr. Gowdy, and the Secretary, Mr. Murton, did everything in their power to make the show a success, and they were re-elected for the same position on the board for this year.

Light and Dark Brahmas were exceedingly fine, this class containing more good birds than last year. Cochins—Every class well represented. Polands—Very fine. W. C. Black—Less in numbers than usual, but extra quality, prize birds scoring as high as 98½ points. Hamburgs, as a class, better than usual; Golden Spangled, good; Silver Spangled, good, but not up to former shows in the old class. Silver and Golden Pencilled, good. Leghorns—A very large collection, but a great many inferior birds. Houdans—Falling off greatly in numbers, but in quality good. Dorkings—Silver Grey and Colored a splendid display; White, only four coops on exhibition, but very fine birds. Games—A large display and several good birds. The Plymouth Rocks made the finest display in the show, the prize birds scoring from 95 to 98½ points, and several birds were claimed at high figures. Turkeys, excellent; geese, good, one Bremen gander weighing over 28 pounds. Ducks, Aylsbury, two good pens; Pekins, medium; Rouen, very good. Bantams—A splendid collection, prize birds very fine. Pigeons, a fine class; carriers, pouters, tumblers and fantails extra good; other classes about the same as at former shows. Judges—Sharp Butterfield, Sandwich; L. G. Jarvis, London, and H. Cooper, Hamilton. The show will be held in Guelph next year.

FEEDING AND FERTILITY.

To secure healthy and vigorous birds: First.—Be sure the cock birds are robust and well proportioned in build, and a different strain from the hens. Second.—A varied diet; different grains and vegetable. I find a warm mash in spring very necessary. Small potatoes boiled and mixed with shorts once a day, and say once a week you may add a few chopped onions and a teaspoonful of cayenne pepper. They like thick milk. Be sure and have plenty of chaff or cut straw on the floor, and scatter your grain amongst it; this will furnish them with plenty of exercise. Plenty of lime or bone-dust and gravel is also necessary to insure health, and for the formation of shell. Following these rules you will not be troubled with feather eating fowls, and with warmth, sunlight and cleanliness, will assure you healthy chicks, plenty of fresh eggs, and fowls worth raising.

The Apiary.**Winter Feeding.**

This is a most important part of the management of our bees, and should be practiced with the greatest care; as, if clumsily or carelessly done, it may cause the death of the colony. This winter many stocks will be out of stores very soon. Owing to the failure of the usual fall honey crop, and the protracted fine weather, those bees which were not fed later than the time usually recommended, will be in want before spring. Bees which had sufficient stores by the fifteenth of September for an ordinary fall and winter, have been found only half provisioned when the winter set in. This because they flew so often before clustering for the cold; when bees fly much they always consume large quantities of food. I strongly advise each bee keeper to make sure at once that his bees, even those which were over weight in October, have sufficient to carry them through. I expect to hear of very heavy losses next spring from starvation. Of the weather none can complain.

Feeding in winter is very simple if properly done. Many attempts have been made to feed honey and sugar syrup in confinement, but the results have not been encouraging. Liquid feeds disturb the bees too much. The bees are not content merely to store it in their combs, but gorge themselves with it, and, being unable to fly, in perhaps five cases out of six, die of dysentery. Candy of different kinds has been tried with varying success, but has proved itself to be the only safe winter feed. Only that, however, made from the best granulated sugar should be used. Of this there are two kinds, viz.:—The hard cakes, and the porous sticks. The former have in most cases given good satisfaction, but are objectionable on account of their hardness, which prevents the bees wintered "outside" working on them in cold weather. Nor can they conveniently cluster about this feed. At best, too, only a few bees can reach it.

To the porous sticks I call attention as a winter feed which is safe and convenient, and which may be used by the bees without the aid of heat to soften it. These sticks should be placed across the top bars of the frames where the bees can easily cluster among them. They are sufficiently soft to use at any time, and the bees in the lower part of the cluster are constantly supplied by the crumbs which fall, as those working on the candy break them off. Thus all the bees are fed in the cluster. Any crumbs which reach the bottom will be gathered when it is warm enough for the bees to follow them. This candy is made of the purest granulated sugar, and the sticks are about eight to ten inches long by an inch thick. The ordinary cream sticks of the stores will do if they can be obtained without flavoring or adulteration. But supply dealers should have the proper stuff in stock from this till the middle of April, at a price far below that of the stores.

The greatest care should be taken that the bees are not jarred at all, and that they are disturbed as little as possible while being fed. If possible, wait till a mild spell to feed "outside." Raise the cushion or quilt very carefully, lay the candy immediately over the cluster, and close all up again.

Don't let your bees starve.