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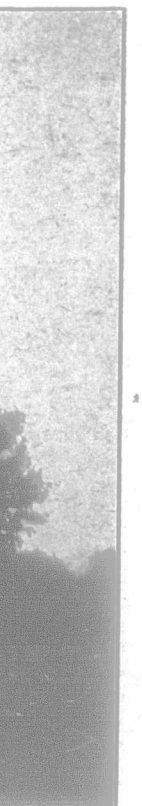
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pleted a yearly record of 20,830.4 lbs. milk, 1,142.32 lbs. butter as a junior two-year-old. She averaged just under 22 lbs. for every one of the 52 weeks in the year.

British Friesian Sale.

That British breeders of Holstein cattle (or Friesians as they are now called in Britain) are coming forward with some very respectable milk records has been increasingly evident recently, although yearly milk records of over 20,000 pounds are, as yet, conspicuously absent. In fact the first and only Holstein cow to give 20,000 pounds or over, in a year, was sold at the auction sale of F. B. May, Essex, June 6. Her name is Eske Hetty and her record was 24,130 pounds in 365 days in 1917 as a 7 year old. Eske Hetty is reported to be "a great cow in every way, with immense size, depth, constitution, bag, veins and milking appearance." She sold for 3,500 guineas to the Olympia Agricultural Company. The same buyers also purchased Routh Blossom III, a four-year-old with a record of 13,420 pounds milk in 308 days, for 1,700 guineas. Two other heifers sold for 650 and 600 guineas, respectively and several more for sums ranging from 200 to 400 guineas.

There were 33 lots offered in this sale and the total was 12,626 pounds, five shillings, an average of 382 pounds, 12 shillings. Of these 33 lots, 29 were females averaging 418 pounds, 14 shillings and 8 pence. Only four males were offered, the oldest being a two year old. The four averaged 120 pounds, 15 shillings.

Butter Price Not Set.

On the market pages of our issue of July 4 there appeared a report from our Toronto correspondent to the effect that it had been believed that the Dairy Produce Commission had fixed the price of creamery butter, a step which has been anticipated for some time. We immediately got in touch with J. A. Ruddick, Dairy Commissioner at Ottawa, and a member of the Commission, in order to find out whether the report were correct. The report was to the effect that the Commission had fixed the price of creamery solids at 43½ cents per pound, delivered at Montreal, and because such a price seems plenty low enough to us in comparison with the price fixed for cheese we are glad to give publicity to the following letter from Mr. Ruddick, which effectually contradicts any statement that the price of creamery butter has been fixed by the Commission. "I do not know how the report first came in circulation that the Commission had fixed the price of butter. You may be assured that if the Ministry of Food decides on a set price for Canadian creamery butter the Commission will make a proper announcement, and it will not be left for the news to filter out in any haphazard way. Any announcements which do not come direct from the Commission may be disregarded.

"While no set price has been agreed upon, the Commission did buy a few packages of butter some time ago on the open market at current rates, and 43½ cents was paid for some of it because that was the prevailing price."

Testing Ice Cream For Fat.

Professor H. H. Dean, of the Ontario Agricultural College, states that his department has been in receipt of many enquiries regarding the new regulations laid down by the Canada Food Board with reference to the manufacture of ice cream, and the methods of testing ice cream for fat. Order No. 34, section 8, of the Canada Food Board, reads: "On and after May 1, 1918, no person in Canada shall use in the manufacture of ice cream more than ten per centum of fat, whether of animal or of vegetable origin, or more than six pounds of cane sugar to eight gallons of ice cream." Prof. Dean states that his department has been conducting some investigations and these investigations have resulted in the establishment of a formula or recipe for a batch of ice cream which will produce about eight gallons of good quality material and which will come within the regulations as laid down by the Food Board.

The cost of the ingredients in this formula will range from 53 to 57 cents if bought in small quantities; wholesale buying would, of course, reduce the cost. The recipe follows: "44½ pounds or 4½ gallons of cream testing 13 per cent. fat; 1½ pounds skim-milk powder; 6 pounds cane sugar, (1½ pounds sugar may be replaced with 2 pounds corn syrup); 4 ounces vanilla extract; 8 ounces gelatine dissolved in 6 pounds or one-half gallon skim-milk. If whole milk and cream are used, mixing equal quantities of these will produce an ice cream testing not over ten per cent. fat, assuming that the milk and cream are of average fat content—3.5 and 18 to 20 per cent. fat respectively." It will be noticed in this formula that 1½ pounds of cane sugar may be replaced by 2 pounds of corn syrup. The sugar supply being under certain restrictions, it is necessary to conserve cane sugar as much as possible, and while there is no ban placed upon the manufacture of ice cream, the United States Food Administration have gone so far as to urge the people of their country to patronize only those firms using corn syrup in the manufacture of ice cream, instead of cane sugar. Ice cream is a wholesome and healthful food, but on account of the fact that it requires so much sugar in its manufacture, other foods are much more saving of sugar, unless a substitute for cane sugar is used.

Prof. Dean gives three methods of testing ice cream for fat, and these are given herewith in his own words. It is particularly necessary, in view of the standard which has been laid down for ice cream, that the material be tested occasionally in order to avoid and guard against

error in standardizing methods. Ice cream cannot be tested for fat in the same way as the ordinary cream, on account of the large percentage of sugar which it contains. Professor Dean's methods follow:

"1. *Glacial Acetic and Hydrochloric Acid Test*—A representative sample of the ice cream is taken and melted and thoroughly mixed; a 9-gram sample is weighed into an 18-gram Babcock cream test bottle. A mixture is prepared using equal parts of glacial acetic acid and concentrated hydrochloric acid. Twenty cubic centimeters of this acid mixture is added to the 9-gram sample of ice cream in the test bottle and is then all well shaken. The bottle is placed in a water bath of 120 degrees F. to 130 degrees F., and shaken at intervals until a brown color appears. It is then placed in the Babcock centrifuge and the test completed in the same way as for testing cream and the reading multiplied by two.

"2. *Sulphuric Acid Test*—To make the test with sulphuric acid, a 9-gram sample is weighed into an 18-gram test bottle. About 9 cubic centimeters of lukewarm water is then added to dilute the sample in order to have about 18 cubic centimeters of mixture in the bottle. The sulphuric acid is then added slowly, a little at a time, at minute intervals, shaking well after each addition until a chocolate brown color appears in the bottle. No definite amount of acid can be stated as the quantity will vary with different ice creams. As soon as the chocolate brown color appears in the ice cream a little cold water may be added to check the action of the acid. The bottle is then placed in the centrifuge and the test completed in the usual way. The reading is multiplied by two.

"3. *Acetic and Sulphuric Acids*.—Weigh a 9-gram sample of ice cream that has been thoroughly mixed. About 9 cubic centimeters of water is then added to dilute the sample. Add 5 cubic centimeters of acetic acid, then add carefully 6 to 8 cubic centimeters, sulphuric acid. Centrifuge, and then add water the same as in other tests. If using an 18-gram bottle, multiply the reading by two, to obtain the per cent. fat in the ice cream. A nine-gram bottle which is graduated to give the percentage of fat directly, needs no correction when reading."

HORTICULTURE.

Watch for cutworms in the garden.

Be sure and keep the weeds down in the young strawberry patch.

If any trees are so heavily laden that they need thinning, now is the time to do it.

A good application of tankage or other good manure on the asparagus bed just now will pay for itself and more.

It is not wise to cultivate raspberries during the picking season. Give one or two stirrings after picking is over, and then stop for the season.

The cover crop should be sown in the apple orchard by now to avoid winter-killing of trees next winter. Rape, buckwheat or red clover are in general use.

Watch the orchard for twig or fire blight. Cutting out of infected parts and disinfecting all tools and wounds with corrosive sublimate 1 to 1,000 is the only method of combating this rapid spreader.

The United States Fruit Crop.

An estimate of the apple crop of the United States, made by the Bureau of Crop Estimates on June 1, gives the condition as 69.8 per cent. as compared with a ten-year average on June 1, of 68.2 per cent. New York State, as a whole, will have a much heavier crop than last year, with quality prospects much in advance. The Hudson Valley crop will be somewhat less than last year. The New England Baldwin belt, comprising the States of Maine, New Hampshire and Massachusetts shows a lighter condition percentage of 62 as compared with a ten-year average of 89, 65 and 85, respectively. Cold weather damaged the Baldwins in Maine and the Gipsy moth, together with a light bloom, hit the New Hampshire crop. In the heavy-producing counties of Virginia, West Virginia, Maryland and Pennsylvania, a condition of 65 per cent. was indicated as compared with 62 per cent. last year. Southern Ohio reports 72 per cent. as compared with 25 per cent.; Michigan, 82 per cent. as compared with 70 per cent.; Illinois equal to last year, and Indiana is similar to Illinois.

A very large boxed apple crop is indicated in the Western States. Hood River, Oregon, reports 100 per cent.; Southern Oregon 50 per cent.; Willamette Valley, fall varieties 75 per cent., winter varieties 50 per cent. Yakima, Washington, has a crop estimated at from 9,000 to 11,000 cars. Wenatchee will have about the same sized crop as last year or 6,250,000 boxes, with Jonathan and Delicious good. A record crop is reported from Spokane County, sufficient to overcome the light production in Walla Walla. Washington State normally produces over one-half of the Western boxed apples. A light crop in Idaho is one of the outstanding factors in the West. Last year's production was estimated at 3,500 cars, this year it will not exceed twenty per cent. of a normal production. California stands second to Washington in importance among the Western States, and the 1918 crop promises to be lighter. Generally speaking, the peach crop of the United

States from sections from which we have reports will run from thirty-five to forty per cent., cherries fifty per cent., pears seventy-five to ninety per cent. in the Western States. In Wayne County, New York, about fifty per cent. of the peach trees are practically dead from winter injury and the balance badly injured. Conditions with respect to small fruits are relatively the same as in Canada.

July Fruit Crop Report.

So far there has been no improvement over the June reports received from the Annapolis Valley in Nova Scotia. The crop was very variable but will be less than that of last year; probably only thirty to forty per cent. of a normal crop, and a total yield of not more than 400,000 barrels. The weather during the blossoming period, which was about three weeks earlier than usual, was cool and not generally favorable for pollination. Apple scab, however, is almost completely absent and the fruit is reported to be of a remarkably fine quality. Varieties giving the best promise are: Gravensteins, Fallwater, Ribston, Blenheim and Stark. A fair crop is expected in Prince Edward Island, while in the Fredericton section of New Brunswick early varieties are about seventy-five per cent. of a normal crop. Winter varieties are for the most part light.

The weather in Ontario and Quebec for the past month has been cool with considerable rainfall and the ripening of small fruits has been delayed; in fact, the temperature has been below the average for this time of the year and rapid growth has been prevented. The best prospects for apples in Ontario are in Prince Edward County, Georgian Bay, district, and in the Western Counties, where the yield will be much greater than last year. Spies and Baldwins are very light in all districts, with winter injury very strongly emphasized in Eastern Ontario and Quebec, particularly in young orchards and a large number of the old Fameuse orchards.

In British Columbia the crop will be about equal to that of last year and would probably have been much greater had not severe frost injury been experienced on May 24. Vancouver Island reports apples only about fifty per cent. of last year, with a very heavy drop. The inland Valleys show very irregular crops, with conditions particularly favorable in the Kootenay Valley. In this section cherries and plums are sixty per cent., apples eighty-five per cent., and raspberries seventy-five per cent.

Generally speaking, the cherry crop is not heavy, no material change being recorded since our survey of the Niagara district a short time ago. In British Columbia there is a good average crop, although there has been some frost injury and a heavy drop. The Niagara pear crop shows about forty to fifty per cent. of normal, with Keiffer and Bartlett showing best. The pear crop is a failure in most of the other parts of Ontario, Quebec and Eastern Canada, although a heavy crop is reported from British Columbia. Winter injury has reduced the peach crop to about forty per cent. of normal in Ontario. In British Columbia the yield will not exceed sixty per cent. of normal, a loss of about twenty-five per cent. having been due to the May frosts. The plum crop in British Columbia was reduced twenty-five per cent. by frost. Japanese varieties are light, with Reine Claude, Bradshaw and Gueli giving the best promise. Throughout Ontario and Quebec the crop is light to fair, with about fifty per cent. of the trees winter-killed in Quebec, except varieties of the American species.

Grapes generally will be a good crop and raspberries from sixty-five to seventy-five per cent., but strawberries are light in acreage and both strawberries and blackberries suffered very heavily from winter-killing.

By approval of the War Trade Board the entry of fruit and vegetables into Canada may be permitted without license until otherwise ordered, except the following: Blackberries, gooseberries, currants, cucumbers, watermelons, artichokes, shallots, green peas, romane, parsnips, salsify, pomegranates, quinces, nectarines, mangolds, egg plants, green peppers, Brussels sprouts, asparagus, mushrooms, parsley, endive, beets and turnips.

POULTRY.

Great Britain is about to issue grain cards to Biddy and her family.

An English correspondent states that the demand for Indian Runner ducklings is about twenty times the supply.

The New England States are watching Canada's experiment in regulating the grading of eggs. We in Canada need some regulations regarding the grading of eggs locally, or within each province.

The Advisory Council of the National War Emergency Poultry Federation of the U. S., met in Chicago, June 10 and 11, to complete and adopt by-laws. The objects of the federation are to further the war for the Allies and "to promote and protect the poultry industry during these trying war times and in the reconstruction period after the war, when it will be necessary to restock Europe and practically all the balance of the civilized world with poultry for commercial and breeding purposes."