

new growth will be induced and liable to severe winter injury.

Harvesting is most important with raspberries, because the fruit is soft and must be carefully handled if it is to reach the market in good condition. Frequent picking is an essential, and the better growers pick at least every other day. To reach the market in good condition the berries should be firm and well-colored, but not over-ripe, although in the home garden, or for a strictly local trade, it is possible to leave the fruit on longer until a higher flavor has developed. The berries should never be picked wet, and, after harvesting, should be kept in a shady place and as cool as possible. Pint boxes for raspberries offer the most attractive package, particularly where a high-class trade is engaged in. The majority of growers in Ontario, however, use the standard berry box which holds four-fifths of a quart.

POULTRY.

Classification of Eggs Before the Candle.

Eggs that are rejected by the candler may be of many different kinds, each of which has its specific name based upon the reason for its rejection. Generally speaking, the edible eggs that are detected by candling are fresh, stale, weak and hatch-spot eggs. Eggs with movable air cells, double yolks, or olive-colored yolks may be edible if there is no deterioration. On the other hand, the inedible eggs are those showing black rot mixed rot, white rot, blood ring, seeping yolk, crusted yolk, yolk which is stuck, heavily-mottled yolk, large embryo, bloody white, blood spots or other foreign body, and mouldy eggs. Sour or musty eggs, or eggs with green whites are inedible, but cannot be detected by candling. The following types of eggs are those which are found chiefly during the warm weather, or during the hatching season:

HATCH-SPOT EGGS.—When candled this type of egg usually shows an enlarged air space with a white that is thin and clear. There is a distinct reddish glow around the germ spot, which is visible, and usually located about the middle of the egg. It is distinguished by this reddish glow on the yolk. When viewed out of the shell, the white shows thin and clear, but does not reflect the light as strongly as a fresh egg. The yolk shows a hatch-spot and is flattened, being especially weak around the embryo.

WEAK EGGS.—The air space is enlarged, the white very thin and clear, and the yolk is whole but very weak, and may also bear a hatch-spot and be mottled. The distinguishing characteristic is the weak condition of the white and yolk. When the egg is taken out of the shell the yolk sac often breaks.

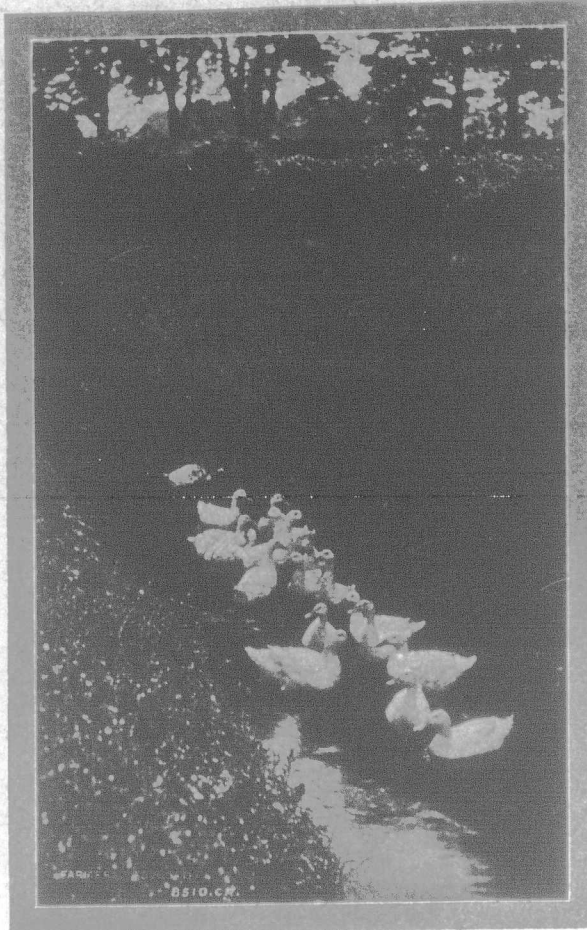
BLACK ROT.—The air space is very much enlarged, with the lower wall either movable in outline or broken. The distinguishing characteristic is that the contents of the shell are gray or black in color. Taken out of the shell the color of the mixture may vary from a gray-green to a dirty yellow. It may contain a decomposed embryo, and will be accompanied by a most disagreeable odor.

BLOOD RING.—The air space may be large or small, the white thin and clear, and the yolk will show a distinct reddish glow on one side, in which will be seen a blood ring or portion thereof. Out of the shell, the yolk will show the germ spot enlarged, and surrounded by a complete or partial blood ring. The yolk will be flattened and often very weak.

LARGE EMBRYO.—The air space will be enlarged, with the white thin and clear. The yolk is covered with a network of blood vessels, in the centre of which the embryo is beginning to take form. The latter is seen as a dark body on the yolk, its size depending upon the period of incubation. The yolk may or may not be broken, and as the egg grows older the blood vessels may become faded. Outside of the shell the white is thin and clear unless the yolk should be broken, and its distinguishing characteristic is the size of the embryo, which is covered with a network of blood vessels.

YOLK SLIGHTLY STUCK.—The air space is enlarged and the white will be thin but possibly streaked with yellow, if the yolk sac is ruptured. The yolk will be attached to the shell by a small area of the yolk sac. When the egg is turned, the yolk waves, and since the yolk sac is weak it frequently may be in a ruptured condition, with contents flowing into the white. Twisting during candling may tear the yolk from the shell, when the appearance before the candle will be similar to that of a mixed rot. If the yolk has just begun to stick when candled, the twisting before the candle may break it loose without injury, and it can be graded as a good egg. The distinguishing characteristic of the egg before the candle is the sticking of the yolk by a small area so that the yolk swings easily when the egg is turned. Out of the shell, eggs of this type will show a broken yolk and a yellow mark on the shell where the egg has stuck.

Sir Thomas White has offered his resignation to Premier Borden as Minister of Finance. His has been a very difficult position during the war, and he is held in high regard by both sides of the House of Commons, both his ability and his serious purpose being well recognized. May his successor be able to bring the same attributes to bear upon the work of the Finance Department.



Ready for a Swim.

FARM BULLETIN.

Annual Conference of Agricultural Representatives.

A very full program marked the annual conference of the Agricultural Representatives of the Ontario Department of Agriculture, which was held at the Ontario Agricultural College, Guelph, July 14 to 18. Nearly every important feature of County Representative work was discussed, but the conference was probably not as valuable as it might have been had fewer subjects been placed on the program, and more discussion by the Agricultural Representatives allowed. A representative of "The Farmer's Advocate" attended the conference on Wednesday and Thursday, the two most important days, and listened to the discussion. On Wednesday morning several of the representatives, as well as E. G. Gordon, of the Co-operation and Markets Branch, Department of Agriculture, Toronto, discussed the question of live-stock shipping associations. During the past year or two these associations have been rapidly growing in number, and are now doing perhaps the most important co-operative work in the Province. Agricultural representatives have helped to organize a great many of these associations, and a discussion was based on their successful organization and operation. A very interesting feature of the session was a discussion, by J. B. Fairbairn, of the Vineland Co-operative Fruit Growers' Association. Mr. Fairbairn thought that profits from sidelines in the co-operative association should not be divided on the basis of the total business done, since a grower might sell \$5,000 worth of fruit through the association, but do no business with it in the way of buying supplies. Another man might sell \$3,000 worth of fruit through the association and buy \$1,000 worth of supplies, upon which there would be a greater profit. Mr. Fairbairn contended that the latter man should receive the benefit from the greater profit on the supplies which he purchased. The profits from this association are paid out on the basis of fifty per cent. on the stock held by members, and fifty per cent. on the amount of business done through the association.

J. W. Noble, Agricultural Representative for Essex County, discussed the methods practiced by the Erie Co-operative Company, Leamington. This Company is a one-man, one-share, one-vote association, having a business manager and a general manager, and about 250 members. The association ships from Leamington, Ruthven, Harrow and Kingsville, and owns about \$14,000 worth of property. The members get a dividend upon the amount of business done through the association, and in 1918 it cost 2 3/4 per cent. to market the produce. In addition to this, 1 3/4 per cent. was allowed for a sinking fund. Shares are sold at \$100 each, and 25 per cent. must be paid up. Members get a delivery receipt for each day's product, and payment is made every two weeks, members always having one week's payment due them from the Company. When a member resigns from the association his share of stock must be sold at par either to a new member approved of by the executive, or it is returned to the treasury.

R. H. Ashton, Manager of the Dundas Co-operative Company, Morrisburg, reported a membership of 350, and a capital of \$350. Each member is required to take out one share of stock at \$20 per share, of which only five per cent. is required to be paid. The associa-

tion does, therefore, a credit business, borrowings at the bank being guaranteed by influential members. This year a large export business in eggs is being done by the association, and at present 3,000 cases of extra eggs are being held in storage for fall shipment. At the end of each quarter a co-operative dividend is calculated, but is not paid until the end of the year. Patrons are paid the regular current market price, but in January and February of 1918 the profit above store price amounted to fifteen cents per dozen, while for the remainder of the year the profit varied from three to six cents per dozen above the store price. J. E. McCrostie, in charge of co-operative egg circles, Live Stock Branch, Department of Agriculture, Ottawa, reported that there are approximately 19,000,000 hens in the Province of Ontario, and that so far only about one-half of one per cent. of Ontario eggs are marketed through egg circles. He thought that there was a splendid opportunity to work up a large export trade in eggs from Canada, and that the egg circle is a splendid way of securing both quality and quantity for the market. H. A. Dorrance, Dufferin County, reported the prospective organization of the Orangeville Marketing Company Limited, chiefly for the marketing of potatoes, and a man is now touring several of the United States, looking for the best ideas for an up-to-date warehouse. F. C. Hart, Director, Co-operation and Markets Branch, Toronto, thought the trend of events was toward larger organizations, and thought the smaller ones should be organized on a uniform basis. He thought agriculture could best be built up on co-operation as a foundation. He also strongly urged that the representatives keep away from actually handling the business of the co-operative associations.

A splendid afternoon was put on by the Live-Stock Department of the College, when the work with the various kinds of stock was gone over by Professor Wade Toole and Professor J. P. Sackville. It was reported that a new piggery is to be erected and that next year, if the appropriations can be secured, a new judging pavilion and a small abattoir are to be erected. A great deal of the best stock kept at the institution was paraded before the representatives, each animal being briefly commented on by Prof. Toole. The Professor pointed out that the College was primarily a teaching institution, and said that the work done by his Department had nearly all to be carried out with this in view. Among cattle, Holsteins and Shorthorns will be kept in largest numbers, but representatives of all other breeds that are at all common will be kept for class-room purposes. A 3,800-lb. team of five-year-old Percheron mares has recently been added to the stock of horses, while among sheep, Leicesters and Shropshires will be kept in fair numbers for the actual breeding work. Imported rams of these breeds will be maintained. Among swine, more Yorkshires will be kept than any other breed. Dr. McGilvray, President of the Ontario Veterinary College, spoke briefly, and urged that the representatives should utilize the College in any way that would be of assistance to the farmers.

On Thursday the forenoon was taken up with a discussion of horse breeders' clubs, elimination of the scrub bull, and boys and girls' club work. A very strong campaign is being put on for the elimination of the scrub bull, and the result of a census taken in each of the counties showed that of 19,492 bulls reported, 47.02 per cent. were grades. Of the various breeds, 29.6 per cent. of the Shorthorns were grades; Holsteins, 54.8 per cent.; Herefords, 27 per cent.; Angus, 13.2 per cent.; Ayrshires, 57.4 per cent.; Jersey, 24.7 per cent. In the dairy district in Eastern Ontario, the percentage of grades ran from about 54 per cent. in Northumberland County to 80 per cent. in Hastings County, nearly all of the counties being over 60 per cent. In the beef districts the percentage is much less. Professor Wade Toole has charge of the publicity campaign, which it is expected will be launched shortly. Most of the representatives were enthusiastic about boys' and girls' live-stock club work, and at present there are twenty-two clubs in Ontario; twelve pig clubs, seven calf clubs, one sheep and two miscellaneous live-stock clubs.

In the afternoon the session was held at the wool-grading warehouse of the Ontario Sheep Breeders' Association. An explanation was given of the various grades of wool, and the necessity for each. R. W. Wade, Director of the Live-Stock Branch, Toronto, and Secretary of the Sheep Breeders' Association, put on a competition for the representatives in wool grading. This was won by R. M. Tipper, Ontario County. At the conclusion, Mr. Wade announced the prices which had been received for Ontario wool this year, which are as follows: fine medium combing and medium combing, 67 cents; fine medium clothing and medium clothing, 62 cents; low medium combing, 60 cents; low combing, 52 cents; coarse, 43 cents; rejects, 15 to 40 cents.

National Dairy Council Wins.

Information received from D'Arcy Scott, General Counsel and Secretary of the National Dairy Council, indicates a victory for the National Dairy Council in its first case before the Canadian Railway Commission. Some months ago the express companies asked for a substantial increase in all express rates. The rates on cream are special commodity rates and, whereas an increase of approximately one hundred per cent. was requested, the Board of Railway Commissioners has dismissed the application for increased rates on cream. Some changes have been made in the regulations respecting pick-up and delivery service, and the Express companies are now relieved of the obligation to cart cream empties. The Board is to consider the classification of ice-cream in the near future.

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