

fine, two or three bushels of wood ashes; dissolve a pound of copperas in hot water and sprinkle over the charcoal, then add the ashes and sprinkle two or three quarts of salt over the whole. This, if placed in a box to which the pigs have access, will be relished in small quantities by the hogs and keep away disease.

Cure of the Dairy Cow.—Mr. John Gould said a cow should be so bred, trained and provided for that she will need "to take no thought for the morrow," but will be able to devote her entire energies to filling the pail; therefore, the necessity of every comfort, perfect health, and a properly-balanced ration, and all to be produced so cheaply that her product will yield a margin of profit to her owner.

Good Roads.—Mr. A. W. Campbell, St. Thomas, gave an address criticising the statute labor system. He also considered that every farmer's son should receive some instruction in roadmaking, and that qualified roadmakers only should be allowed to oversee the construction and maintenance of public highways.

Economy in the Dairy.—Prof. Robertson showed that by conforming to the rules of economy—that is, making the most of everything—the cost of feeding a cow can be reduced two cents per day and her milk increased three pounds per day. We feed cows to keep them alive, to keep up the fertility of the land, and to have plant food changed into such products as milk, cream, butter, cheese, veal, etc. Now, the greatest returns can only be obtained when the food fed is as nearly as possible all assimilated by the animal, therefore the need of a balanced ration. To illustrate the worth of a balanced ration, the speaker referred to the Scotchman raised on oatmeal—a balanced ration—as compared to the Chinaman, who fed on rice, a one-sided food; the value of potatoes and buttermilk, a balanced ration, in turning out the robust, intelligent Irishman; the pork-and-bean ration of the New Englander also serves to show what a food will do when it contains the right proportion of albuminoids to carbohydrates. It is just as important to have a cow's ration balanced as a man's. Her food should be bulky, juicy, palatable, and cheap. Fodder corn, horse beans and sunflower heads made into silage gives a balanced ration, but on dry, light soil, horse beans fail to give a good crop; in such a case, peas or oilcake should be supplied to make up the albuminoids so largely present in the beans. Cut hay or straw, and carrots or mangels pulped and mixed with the silage, make a cheap, well-balanced and profitable cow's diet.

The Dairy Cow.—Mr. Everett outlined the management of calf up to cowhood, which agreed in substance with John Gould's teaching. There were, however, a few new points. A calf should never be allowed to suck her dam, but be removed from the stall a few hours after birth and fed. New milk should be fed three times a day for a couple of weeks, gradually changed to skim when the calf is four weeks old. Linseed-meal porridge may then be added to make up for the loss of the cream. A calf can be taught to eat whole oats when quite young by having them rubbed on its nose and mouth when wet from drinking milk. A heifer should have made a good lean meat growth at two and a-half years old, when she should have her first calf. She should then be milked at least fifteen months before having her second calf, the object being to establish long-milking habits and to allow her to grow to a good size.

Dairying in Quebec.—J. G. Chapais, Assistant Dairy Commissioner, Quebec, delighted his audience by an interesting and brilliant address on their work in the Lower Province, the sum and substance of which is largely contained in "The Outlook for Canadian Dairying" in our January 1st issue. He also described the Quebec Jersey cow as given in our August 15th (1894) issue.

The Care of a Dairy Herd.

[From a Farmers' Institute address by Mr. Joseph Yuill.]

Mr. Yuill has several box stalls with one corner boarded up three feet high and an old salt bag hanging in the stall. If the attendant is there when the calf is born, put the salt bag round the calf, lift it into this corner, so that the cow can lick the calf as long as she pleases, and the calf cannot suck the cow. If the cow is in very high condition and in danger of milk fever, she should be reduced by feeding poor feed and giving one pound salts once a week for three or four weeks before calving; as soon as the calf is dropped she should get another pound of salts: she should also have a warm drink composed of two gallons of water, two pounds of bran and one tablespoonful of salt. While she is licking the calf, milk the cow, feed the calf all the milk it will take, and give the cow the remainder. Allow the cow to remain with the calf until after the calf is three days old; by that time the danger of milk fever will be over. Tie the cow up in her stall. The calf should be allowed to run in a box stall, but if no box stall is convenient, the calf may be tied by the neck in its own little stall. Feed the calf all the mother's milk it will take, until the milk is fit to use; that will be about the eighth or ninth milking. The way to know when milk is fit to use is to put some of it on the stove, allow it to come to a boil, set it away to cool; if it curdles it is not fit to use. That is the way to know when to milk using milk when the cow is coming near her time for coming in again. As soon as the milk is fit to use, commence mixing skim milk with the new milk: by the time the calf is four to six weeks old

it should get no more new milk: as soon as the skim milk has been added feed linseed, by steeping one teaspoonful of flax-seed, to each calf, by putting it into a cotton bag and steeping it for twelve hours in warm water, and mix the juice in the calf's milk. The flax-seed may either be ground or unground. As soon as the calf is old enough to lick dry meal, feed it in a box not less than twelve inches square, so that the calf would be compelled to lick it slowly. A very good mixture for calves is four pounds bran, three pounds oats, two pounds peas, and one pound barley; the peas, oats and barley to be ground fine. Feed above mixture according to age and digestive power of the calf, with as much fine ground flax-seed meal as the calf is able to properly digest. As soon as the calf is old enough to lick meal, the flax-seed should be fed dry, mixed with the meal, and then early-cut, well-cured clover hay. He preferred to have his calves dropped in autumn. They would be in good shape to be turned on the grass in spring. Some cows drop their first calf at two years and a calf every year after that time. Milk well up towards calving, especially the first year, so she may acquire the habit of being a persistent milker. Mr. Yuill stated that as soon as the cold nights come he shuts the cows in at night and turns them out through the day, and when the real cold weather comes he does not turn them out again until spring. The water is pumped into a tank with a windmill, and runs in front of the cows within easy reach. He milked at 5:15 night and morning; fed five pounds unthreshed oats, and mixed peas, oats and barley, cut green and run through the cutting box, forty pounds ensilage, four pounds bran, three pounds ground oats, two pounds peas, and one pound barley, and four ounces salt water. Groom and clean out the stables while they are eating their breakfast; this should be finished by 9:30 o'clock. The cows should be allowed to remain perfectly quiet until 3:30 p. m. At that hour clean out stables, water, and feed all the clover hay they will eat up clean: milk at 5:15. A thermometer is kept hanging in the stable, and the temperature is kept as near 60° Fahr. as possible. The work should be all completed by six o'clock, so that the cows can have the remainder of the time to rest.

The great secret in attending dairy cattle is to be as punctual as possible. A cow is an animal of habit, more so than any animal on the farm, and requires to be attended with a great deal of punctuality. She needs to be treated with the utmost kindness and kept as comfortable as possible in order to attain the best results.

POULTRY.

Port Hope Poultry Show.

At the show held in the Town Hall of Port Hope, Jan. 15th to 18th, there were about 900 birds on exhibition; and in quality they were better than at any previous exhibition. The building was well adapted for a poultry exhibition, but the coops were not nearly large enough to show the birds off to advantage. We hope to see an improvement in this direction next year at the Ontario show. We should have portable coops for this exhibition—say the Spratt's Patent Coop—that can be shipped to any point where the show is to be held. Could we not prevail upon the Government to give us a grant to procure suitable coops, to be the property of the Government. The Ontario show is one of the largest exhibitions held in America, and growing in popularity every year. Yet, our birds have always been shown to disadvantage, on account of the smallness of the coops and the way they are crowded together. I append a few notes on the classes shown at Port Hope.

Brahmas—Light, a small class; a few good specimens. Dark, a better class and a close competition.

Rock, especially White, extra good, and in good condition.

Leghorn classes. The best we have seen this year. I should like to see the winning bird at the New York show.

Minorcas. A small class, but several good birds. First cockerel one of the best I ever saw.

Wyandottes, on the whole, a better class than at the Ontario show.

Spanish. A fair class, but a great many of the specimens lacked lustre of plumage.

Andalusians. Out in good force, and all good birds; the first cockerel, first, second and third hens were purchased for the Poultry Department at the O. A. C. Guelph.

Not a large exhibit of ducks; fair in quality. No geese or turkeys on exhibition. Pigeons were a great attraction, nearly all varieties being represented, and a fine lot of birds.

The dressed poultry was also very much admired, very nicely dressed and well fattened; evidently the people around Port Hope know how to place on the market poultry properly drawn and cleanly dressed.

The crosses between the Indian Game and Rocks were quite in advance of all others, and I think in nearly every case carried off the red ribbon.

The worthy President and Secretary, and in fact all the directors, did everything possible to make the show a success, and to make it pleasant for the fanciers. The show was opened by the Hon. John Dryden, Minister of Agriculture, and in the evening he addressed a large audience in the Court House. The Mayor occupied the chair, and short

addresses were also made by Mr. Gilbert, of the Poultry Department at Ottawa, and others. The poultry were judged by L. G. Jarvis, of Guelph, and the pigeons by J. B. Johnston, of Toronto.

L. G. JARVIS,

Superintendent Poultry Department,
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The New York Poultry Show.

The great New York Poultry and Pigeon Show, held in Madison Square Gardens, was again a great success. Over five thousand birds were on exhibition. The fowls were all cooped in Spratt's Patent Coop (only one bird in a coop), made of wire, and showed to great advantage. We hope to see, in the near future, our birds cooped in the same or a similar manner at Canadian shows.

Poultry Judges:—T. K. Bennet, Phillipsburg, N.J.; R. G. Buffington, Fall River, Mass.; Sharp Butterfield, Windsor, Ont.; R. A. Colt, White Plains, N.Y.; Dr. W. A. Conklin, New York; J. T. Cothran, Montclair, N.J.; Dr. E. W. Deyo, Montgomery, N.Y.; J. H. Drevestadt, Johnstown, N.Y.; Frank Gaylor, Tarrytown, N.Y.; L. G. Jarvis, Guelph, Ont.; P. H. Scudder, Glen Head, L.I., N.Y.; F. B. Zimmer, Gloversville, N.Y.

Again the Canadian exhibitors were very successful. Wm. McNeil, of London, was the largest exhibitor, and took more prizes than any other exhibitor at the Exhibition: his birds, although having been shown at Kansas and at the Ontario shows, were in fine condition. Richard Oke, also of London, was very successful. Thomas A. Duff and Wm. Barker, of Toronto; Kent and Oldrieve, of Kingston; Hare, of Whitby, and C. J. Daniels, of Toronto, who won a prize on every bird exhibited, made up the Ontario contingent. Duff's Minorcas looked fine, taking all the prizes in Whites and three firsts in Blacks, and one third, also third on Barred Rock hen. Mr. Barker showed some fine game, and in strong competition won several first prizes. Hare, of Whitby, did well with his Buffs and Spanish. J. H. Saunders, the genial Superintendent of the Poultry Department of the Western Fair, accompanied the Canadians, and assisted materially in making the trip enjoyable.

Brahmas, both light and dark, were out in great force, some grand birds.

Cochins, using a bye-word, were "out of sight"—all classes; and the judge had to use his keenest judgment to place the ribbons on the right coops.

Langshans—Not as many as last year; several grand birds, with fine lustre and plumage.

Leghorns—A large class, as usual, and several fine birds. We noticed a decided improvement in the Buffs; the winning birds very clean in color, and free from black or white feathers in tail or wing; 200 Leghorns were on exhibition, in all classes.

In all classes, 175 Rocks were shown; on the whole, in quality not as good as last year, especially the hens and pullets; some of the winners were really nice birds, and brought fancy prices.

All classes of Polands represented, excepting Silver, unrepresented; all prizes, excepting three thirds, going to McNeil. They were much admired by the exhibitors, and several of them exchanged hands at fancy prices.

Minorcas—Well represented, and the winning birds in fine condition. We noticed several large, well-shaped birds, but lacked lustre of plumage, and some with a great deal of purple barring.

Wyandottes, especially Golden, largely represented, the Silvers not nearly as good as last year. I never saw as good Golden, nor so many; they seem to have better lacing and more open centres than the Silvers. Several good Buffs were shown, and no doubt will become an important variety in this class.

Andalusians were a better class than past years; quality fair.

Houdans a good class; an improvement over last year, especially in size, which is very important in this class of fowl.

Dorkings, especially the Silver Gray, the best ever shown at this Exhibition.

Pekin Ducks—A large class and very large individuals. Other varieties not as good. I would like to see our Canadian Rowens and Aylesburys at this show; also some of our Embden and Toulouse Geese.

Several fine Bronze and White Turkeys were shown. After getting through my duties as judge, I spent a good deal of time in the incubator and brooder room. Several incubators were hatching, and thousands of people interested themselves by watching the chickens come out of the shell and drop to their department below and give room for the others.

After remaining in the incubators a day, they were removed to their foster mother or brooder. It is a very hard matter to decide without testing them what one to purchase if you desire a machine. In closing, would say the management of this great Exhibition could not be better. Mr. H. V. Crawford, the Secretary and Superintendent, with his assistants, did all in their power to make everyone feel at home, and was always ready to give any information to the exhibitors and judges at any time. At the close of the Exhibition, Mr. Crawford was presented by the exhibitors and judges with a handsome gold watch and chain, valued at one hundred and fifty dollars.

L. G. JARVIS.

The Chicago packers are beginning to turn out uncolored butterine, to meet the requirements of the Massachusetts law and the Supreme Court decision covering the same.