

dustrial, but he had to stand 3rd here. He is a big fellow, fine in his make-up and a very good mover. Two three-year-olds and a two-year-old competed in the young stallion class. Lord Minto, by Candidate, and owned by Amos Agar, Nashville, won easily, and made a creditable fight for the sweepstakes award. He is a rangy, sweet horse, with good action. A flash two-year-old, Pat, by Shining Light, and owned by A. Hewson, Grahamsville, stood 2nd; the other colt being King Henry, by the imp. German, Adam, and exhibited by P. J. Thornton, Woodstock.

STANDARD-BRED ROADSTERS.

There were six mature stallions shown and two colts. The 12-year-old Dashwood, 2.20, by Sentinel Wilkes, might be taken for a much younger horse, as he is as fresh as a colt and a great goer. He is a handsome horse as well, and has substance. He won 1st for his owner, Jas. Wetherell, Blair, Ont.



ROSSEAU ROYAL OAK.
First-prize 3-year-old Hackney stallion, and reserve for sweepstakes.
BRED AND OWNED BY H. N. CROSSLEY, ROSSEAU, ONT.

The big, smooth Altoneer, by Sphinx, and owned by Edmond Taylor, Toronto, is also a square, showy trotter, with useful qualities. He won 2nd, the third going to Alcyonium Boy, by Alcyonium. He is a level-going, substantial chestnut, of good road type. The old gray, high and rapid Postmaster was given the reserve award. He is now owned by Messrs. Crow & Murray, Toronto.

SADDLE HORSES AND HUNTERS.

The classes shown under the pigskin fill a large and important place in the show. The entries were large, running up to over a score in some instances, while all sections were well filled. These were judged by Dr. McEachren, Montreal; W. S. Elliott, New York, and J. N. Scatterd, Buffalo. One of the most interesting classes called for combined harness and saddle horses, in which there were 24 entries, including animals ranging from Hackney to Thoroughbred in conformation and way of going. Neither of these types filled the bill, however, but a goodly number conformed to the happy medium. The winning entry was a beautiful chestnut mare, 16 hands, and with a good depth of body. She goes well at all the gaits, and exhibits some schooling. She is owned by Mr. L. Meredith, London, who succeeded in landing a similar victory last year with another horse. In all the saddle classes Thoroughbred blood predominated, and many of the winners appeared to contain little else. They, too, possessed deep chests, high withers, short, stout backs, deep, full quarters, and clean, cordy limbs, which are essential to high-class saddle horses. When these characteristics are coupled with a handsome, neat head and neck, together with good performance at the various gaits, their possessor may stand some chance of winning at the Canadian Horse Show of the present day. The hunter classes were well filled, the principal exhibitors being such successful horse-men as Messrs. Adam Beck, London; Geo. Pepper, Toronto; Yeager, of Simcoe, and others who make a specialty of this line of horses.

HORSES IN HARNESS.

The various classes of single and double harness horses were, without exception, well filled with a class of animals that would seem to put to ridicule the idea of their substitution by inanimate motor carriages for recreation purposes. The entries run up to over a score in some single classes, and the double sections were in every case well filled. The awards here were made by G. B. Hulme, New York; Harry Hamlin, Buffalo, and Gen. Field, Buffalo, who took great pains to place the ribbons where they belonged. Since the dissemination of Hackney blood throughout the country this class of stock has shown marked improvement, and it is to be regretted that suitable mares to breed from are so scarce. Messrs. Beith, of Bowmanville; Crow & Murray, Toronto; Yeager, of Simcoe, and Meredith, London, were among the most successful exhibitors. The success of Messrs. Crow & Murray in the various classes was phenomenal, winning as they did all the money in some big classes, and most of

it in others. They secure the right horses, and then fit and show them in perfection of finish.

MILITARY HORSES.

Artillery.—A new class, and one in which much interest was taken, was that for artillery purposes. It called for horses weighing from 1,100 to 1,350 pounds, bred and owned in Canada, four years old and upwards, 15.2 to 16 hands high, and able to carry 225 pounds. There were sixteen competitors, and with the exception of perhaps half a dozen rather short in rib and light in body, they seemed to fill the bill well. They were judged by J. G. Rutherford, M. P., Portage la Prairie, Man.; Major Dent, London, Eng., and Vet. Major Phillips, Woolwich, Eng. The type selected by these men was of the strong-ended, deep-girthed, active sort. The Hackney breed showed a new field for favor here, as the first winner was R. Beith's registered mare, Cassandra. She was sired by Jubilee Chief, and out of Mona's Queen, and, therefore, a full sister to the frequent winner, Jessica, and her lamented brother, Banquo. A brown mare, Jubilee Queen, exhibited by Willis Bros., was of much the same pattern, being substantial, active and appeared to be of the wearing sort. A big, handsome brown mare, owned by Doan Bros., Toronto, won the 3rd money.

Cavalry.—There were no less than 28 entries for cavalry purposes. They had to be four years old and upwards, 15.2 hands and over, be able to carry at least 225 pounds, and weigh 1,100 to 1,250 pounds. They came from all parts of the Province, and many of them were shown in saddle classes. The winning horses were smart, stout and active, with a deal of Thoroughbred blood and quality. What seems to be wanted is a strong, quick saddle horse, with a good middle as well as powerful ends.

Mounted Infantry.—Twenty-four entries in this section put up an interesting display. The class called for horses 14.2 to 15.2 hands up, carrying 200 pounds and weighing 950 to 1,200 pounds. They were, indeed, a fine lot, smart and well bred, similar in type to the foregoing, but not so large. Preference was given here to the stouter animals, but quality was of as great importance in the judges' eyes. There is a real dearth of this class, for which there is, and will be, a keen demand for years to come.

DAIRY.

Butter--From the Stable to the Table.

BY MISS LAURA ROSE.

ARTICLE IV.

THE CREAMING OF MILK.

During all the different stages in the manufacture of butter, in none is there so great a loss sustained as in the manner many people cream their milk, and it really does seem too bad that after rearing the cows, feeding and caring for them, milking them, then to set and skim the milk in such a way so as to lose all the profit.

The average per cent. of butter-fat in a large number of samples of skim milk collected from farmers was eight-tenths of one per cent.—a loss of nearly one-fourth of the entire butter-fat. I have heard it remarked that such skim milk was good for the calves and pigs. Granted; but looking at it from the standpoint of making the dairy pay, would it not be better to substitute for the butter-fat some kind of meal or oil cake?

There are two methods of creaming milk—the natural or gravity system, and the mechanical or centrifugal system. As the former is the older and more common method, we will consider it first. The milk of some cows creams far more readily than that of others, depending directly on the size of the fat globules. The Jersey and Guernsey cows have the largest fat globules in their milk, consequently it creams the fastest, while the Ayrshire cows' milk is just the opposite. The cream comes to the top because it is the lightest part of the milk, and if it met with no friction would rise to the top of shallow pans in a second or two, but what with the resistance caused by the motion of the fat globules and the different currents due to the cooling of the milk, the gravity process of creaming is slow.

I do not advocate the use of shallow pans only in cases where one or two cows are kept, or in the spring and fall when the ice supply has given out. Strain the milk into the pans as soon as possible after milking, using a fine wire strainer with two or three thicknesses of cheese cloth fastened over the bottom with a tin hoop, so as to be easily and quickly removed—for the cloth must be taken off and washed and scalded each time after using. Keep the milk in a cool, well-aired room, free from odors. The great objection to the pans is the large surface of milk exposed to the atmosphere; therefore, the air must be pure or the cream will be "off" in flavor. Nothing more readily absorbs odors than milk. Avoid having a draft directly over the pans, as it forms a hard, leathery crust on the cream, due to evaporation.

The milk should stand twenty-four hours in summer, and from thirty-six to forty-eight hours in winter—always skimming before the milk thickens. Do not use the old-fashioned perforated skimmer to remove the cream—the following method is by far the most economical: Run a thin-bladed knife around the edge of the cream, pressing well to the sides of the pan; set the pan on the edge of the cream can, tilt it sufficiently to allow a little of

the milk to run over, holding back the cream with the knife (this is done to wet the edge of the pan to prevent the cream from sticking), then, with the aid of the knife swiftly glide the cream into the can. Considerable milk may seem to go with it, but the cream is so thick the milk does no harm.

Where ice can be procured, or where there is a real cold spring, the deep pans are a great improvement over the shallow pans. You may use a cabinet creamer or an ordinary box or barrel. The only essentials are to keep it sweet and clean (avoid spilling milk in or around it), and use plenty of ice—it takes less by keeping the water always cold.

Strain the milk into the cans as soon as drawn, place the cans immediately in the water. To obtain the best results, the milk should be quickly cooled to 45 degrees or below. When the milk has cooled, it is well to cover the cans. Avoid disturbing the milk while the cream is rising. A can with a tap to draw off the skim milk should have a bottom with a three- or four-inch slant. This carries away any sediment and allows more skim milk to be drawn off. When there is no tap, use a funnel-shaped dipper, with no wire around the rim, and a long, straight handle. Wet the dipper in milk or water, lower it point first into the cream, allowing the cream to flow evenly into the dipper. Repeat until all the cream is removed.

There are on the market several kinds of creamers where water is to be added to the milk to assist in the creaming. I have tried some of these, and cannot recommend them, as the results were not at all satisfactory, the test of the skim milk showing a heavy loss of butter-fat.

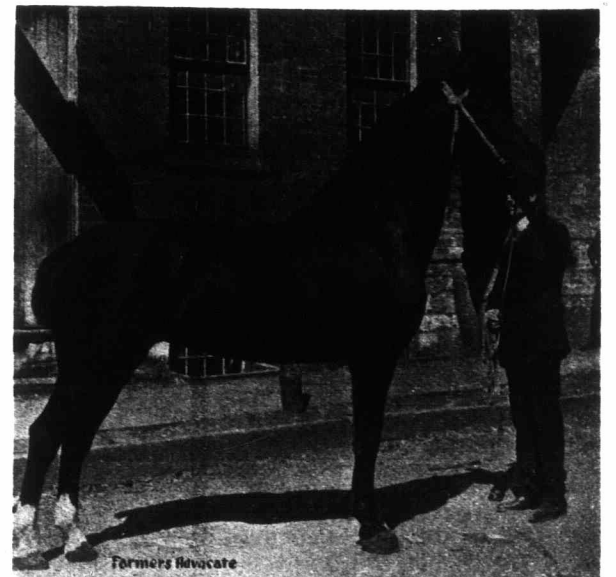
And now I have come to the ideal method of getting the cream from the milk—the cream separator. Before you have hardly read the words, I fancy you are saying, "Too expensive; can't afford one!" They are expensive—cost \$75.00 and upwards—but from my own observations and the testimony of many who have invested in a separator, a machine will pay for itself in a year's time where a herd of twelve cows is kept. So many farmers have told me they average one pound of butter more a week from each cow after getting a separator.

A separator, if properly handled, should mean more butter, better butter, more money, better young stock, and less labor, especially for the women. The skimming and washing of endless cans or pans, and the warming up of the milk for the calves is done away with—the cream only has to be cared for.

In buying a separator, get a good reliable make, one that is strong and simple in construction, will put through a fair amount of milk in a given time, and do close skimming, not hard to clean, and, above all, easy to run, especially if it be a hand machine.

Skill and care should be constantly exercised to avoid unsuspected losses in creaming. If possible, have the skim milk tested occasionally to see the kind of work you are doing, no matter if you are using the shallow pans, deep cans or separator.

Little leakages silently run away with the profits.



CASSANDRA.
Hackney mare. First prize as suitable for artillery purposes.
BRED AND OWNED BY R. BEITH, M. P., BOWMANVILLE, ONT.

The Aquatic Cream Separator.

At a New York State Farmers' Institute meeting, in answer to a question as to whether the Aquatic (or dilution) separator was as good as centrifugal separators, Mr. Cook, one of the speakers, said: "As for the so-called 'Aquatic' separator, I am going to say that it is an unmitigated fraud and a deception of the first water. I have repeatedly tested the skim milk from them and have found from .4 per cent. to 1 per cent. fat. Prof. Wing, at Cornell, made exhaustive tests from a number of them and obtained just about the results I did. No, it is no separator at all, but to catch the dairyman who neither attends Institutes nor reads agricultural or dairy papers of respectability, the fakirs who make and sell them adopted the name of separator. The whole brood, with their aquatic humbug, ought to be piled up with the so-called 'airblast' churn 'and blown out of sight with dynamite.' Don't buy them."