MILKING CONTEST.

This year's milking competition was extended over three days, and proved to be the best in the history of the show. Holsteins were on top, but Geo. Rice's wonderful Ayrshire cow, Jean Armour, was not far below them. Her milk, though not so great in quantity as that of the Holsteins, was considerably higher in butter-fat. The best score, 215.98, was made by Francy 3rd, a Holstein cow, owned by J. H. Caldwell, of Fallowfield, Ont.; second best being Ideline Pauline De Kol, shown by Geo. Rice. The class, name of cow, owner and complete score is as follows:

Class.	Name of Cow.	Exhibitor.	Lbs. Milk.	% Fat.	Lbs. Fat.	Lbs. Solids not Fat.	Points for Days in Milk.	Points for Fat.	Points for Solids not Fat.	Total.
Shorthorn cow, 42 mos. and over.	Morning Glory 5th	S. Bray, Enfield	136.2	3.46	4.72	11.22	4.1	94.40	44.88	143.38
	Carleton Beauty	J. J. Hodgins, Hazeldean	100.1	3.76	3.77	8.47	1 6	75.40	33.80	110.88
	Blossom	R. R. Reid & Co., Ottawa	95.5	3.83	3.66	8.24	—	73.20	32.96	106.16
	Pansy 4th	R. R. Reid & Co., Ottawa	76.6	4.08	3.13	6.32	—	62.60	25.28	87.88
Ayrshire cow, 42 mos. and over.	Jean Armour	Geo. Rice, Tillsonburg	186.3	3.9	7.28	14.51	3.3	153.60	56.56	206.94
	White Floss	H. & J. McKee, Norwich	143.7	4.2	5.98	11.07	4.4	119.60	44.28	168.28
	Sarah Second	H. & J. McKee, Norwich	155.8	3.49	5.44	12.33	9.7	109.80	49.32	167.82
	Maggie Brown of H.H.	N. Dyment, Clappison	146.6	3.74	5.49	11.56	3.9	109.80	46.24	159.94
	Spottie	H. & J. McKee, Norwich	137.3	3.85	5.29	11.00	4.4	105.80	44.00	154.20
	Rosalee of H.H.	N. Dyment, Clappison	136.4	3.6	4.91	10.70	5.5	98.2	42.8	146.50
Ayrshire heifer, under 42 mos.	Forget-me-not	N. Dyment, Clappison	106.0	4.1	4.41	8.74	3.7	88.20	34.96	126.23
	Star's Sarah	H. & J. McKee, Norwich	98.1	3.86	3.79	8.0	11.0	75.80	32.0	118.0
Holstein cow, 12 mos. and over	Francy 3rd	J. H. Caldwell, Fallowfield	212.1	3.7	7.83	14.42	1.7	156.60	57.68	215.98
	Idaline Pauline De Kol	Geo. Rice, Tillsonburg	216.8	3.25	7.07	16.13	4.5	141.40	64.52	210.42
	Mauder De Kol	T. A. Spratt, Billing's Bridge	227.3	3.1	7.05	16.50	—	141.00	66.00	207.00
	Hasketon Belle	J. H. Caldwell, allowfield	181.7	3.1	5.80	12.97	4.2	116.0	51.88	172.08
	Bouncing Jess	Martin McDowell, Norwich	135.8	3.9	5.32	10.23	2.9	106.40	40.92	150.22
Holstein heifer, under 42 mos.	Queen's Butter Girl	Geo. Rice, Tillsonburg	150.7	3.12	4.71	10.33	—	94.20	41.32	133.52
	Lady Colanthus De Kol	M. McDowell, Norwich	118.0	3.7	4.05	8.88	10.4	81.00	35.52	126.92
Grade cow, 42 mos. and over.	Jane	T. A. Spratt, Billing's Bridge	187.0	3.09	5.79	14.87	—	115.80	59.48	175.28
	Rosalee	R. A. Herron, Billing's Bridge	169.7	3.53	5.99	12.20	2.9	119.80	48.80	171.50
	Granny	M. McDowell, Norwich	151.8	3.32	5.04	9.87	2.7	108.	39.48	150.18
	Rose	Wm. Ormiston, Columbus	121.2	3.8	4.63	9.66	—	92.60	38.64	131.24
	Spot	R. Reid & Co., Ottawa	108.7	3.74	4.07	8.76	—	81.40	35.04	116.04
Grade heifer, under 42 mos.	Dina	M. McDowell, Norwich	122.2	2.98	3.65	8.94	1.8	73.0	35.76	110.56
	Tiny	R. A. Herron, Billing's Bridge	113.1	2.73	3.10	8.76	1.9	62.0	35.04	98.94
	Molly	R. Reid & Co., Ottawa	76.5	3.7	2.86	6.10	—	57.20	24.20	81.60

AGRICULTURAL ADDRESSES.

Brief addresses and free discussions formed a valuable feature of the week's educational work. Men who are recognized as reliable authorities in connection with horses, cattle, sheep, swine, poultry, dairying, and the various phases of agricultural operations, were present at the different sessions. Great difficulty was experienced in collecting a crowd sufficient to make it worth the speaker's while introducing his subject. If it were possible to secure the services of an entertainer of some kind, who did not object to making a start before empty chairs, and who could continue for about five minutes while the crowd settled into these chairs, much more good would be derived. As it was, almost all the meetings were lamentably late in starting.

SYSTEM IN HORSE-BREEDING.

The tendency of the average farmer to breed in a haphazard way was referred to John Gardhouse, of Highfield, who urged that system should govern the question of brood mares kept and stallions used. Too many were satisfied with an ordinary horse at low service fee. No man should cross heavy mares with carriage stallions, in order to secure farm horses. Brood mares and colts could be used to advantage in doing the regular work on the farm. "Always set an ideal and stay with it, whether with light or heavy horses," said Mr. Gardhouse. Heavy horses were advocated because the average farmer had neither time or experience that made light-horse breeding within easy reach.

The number of brood mares kept should be regulated by the number of acres in the farm. On 100 acres a man should be able to keep two, worth $150 or $200 each, from which three colts in two years could be expected under average conditions. Much could be done in improving the stock, by selecting a stallion strong in build or characteristics in which the mare was weak.

HORSES IN THE STABLE.

Feeding horses was dealt with by John Bright, of Myrtle, who coupled with feeding the importance of exercise. Much of the success of Scottish breeders in horse-raising was credited to the attention paid to daily exercise. Nothing was more important in the treatment of brood mares. Turning out in the yard was not sufficient. As a rule, the mare stood around—particularly if any feed was within reach. It was more satisfactory to hitch up and travel at least four or five miles a day. Mares carrying foals should not be fat and flabby, because the foals were fat and flabby also, and hard to raise. The hardy mare in working condition produced a strong, thrifty colt.

In handling work horses there was little trouble, provided they were used regularly and fed well on good hay and oats. When the horses were idle, however, trouble came. Most farmers gave too much hay to idle horses. Hay was wasted and the digestive organs injured.

Salt was not given freely enough in the average stable. Good practice was to put about a teaspoonful of salt to a gallon of oats at every meal. On new oats especially, was salt desirable. Man wants salt with fresh meat; so do horses relish new oats better when salt is added. They do not take enough salt when it is left within their reach at all times.

Q.—What is your treatment for joint ill?

A.—It is safe to use any antiseptic on the navel cord, such as dilute carbolic acid or Zenoleum. It should be used frequently and applied thoroughly from the time the colt is born until the wound at the navel heals. This treatment is, of course, preventive.

SELECTING A STALLION.

Dealing with the selection of heavy-draft stallions, Wm. Smith, of Columbus, advised the use of stallions that were superior to the mares to which they were to be bred. Among the points to be considered were good temper, choice underpinning, fine appearance, well-sprung rib, good square action, quick walk, and fairly large, strong feet. In sections where small general-purpose mares prevailed it was a good plan to select sires with strong bone for a time. Later it might be advisable to pay more attention to quality. Smart walkers were wanted by draymen, and, therefore, attention must be paid to this factor. A reasonably lengthy neck, too, was desirable. Pedigree was worthy of consideration, because of the fact that continuous breeding along definite lines counted for something.

With regard to unsoundnesses, Mr. Smith advised buyers to beware of bone spavins. Sidebones were undesirable, but a horse could not be turned down because of their presence.

It was commonly urged to make use of great large stallions. This was not always good advice. The horse of average size and good quality was the one that left the greatest impress in a locality. Large, overgrown horses, although not always uncertain breeders, were, as a rule, more or less freaks, and the size and quality of the offspring were variable.

FEEDING THE ROUGHAGE.

Methods of rendering rough feeding stuffs on the farm palatable were outlined by Robt. Miller, of Stouffville. It was necessary to harvest hay before it became too mature, and to have sufficient help to cure it and store it in first-class condition. Mistakes were frequent in preserving the straw of the farms. It did not pay to overfeed with concentrated foods, and since straw is cheap special care should be given to keeping it in fit condition for feeding.

Few recognized the true value of straw in feeding horses. Heavy horses would do all right without a mouthful of hay, provided well-cured straw was available from the time the rush of fall work was over until operations on the soil began the following spring.

Corn, either as silage or as dry stalks, was an important factor in roughage feeding. When cut and shocked carefully it came in good to cut and mix with straw and other foods during the winter months. Silage was more desirable for milch cows. With dry corn it was well to feed more roots.

Q.—Do you leave your corn standing in the field?

Ans.—No, I always try to get it into the barn as soon as the ground freezes up, or earlier. There is too much trouble and undesirable work about hauling in corn during winter.

Mr. Miller advised plenty of fresh air. An animal outside never contracted tuberculosis, while in close stables, where fresh air was not provided at all times, tuberculosis was common.

Q.—Do you cut hay for horses?

A.—No; not unless the hay is of poor quality. Then it is well to cut it and mix with other feed, or sprinkle with water.

Q.—Do you approve of turning feeders outside?

A.—There is no objection to letting them out, but if they run outside very long they lose much of their flesh.

Q.—Do you not find the corn to become musty in the barn?

A.—No, I always allow it to dry thoroughly and then stand it on end. If it is laid down it frequently musts.

Q.—Are you not troubled with mice in the corn?

A.—No, the remedy is found in keeping plenty of cats.

VENTILATION PROBLEMS.

The fact that plenty of fresh air gave a vigorous appetite was mentioned by J. H. Grisdale as a sound argument in favor of thorough ventilation. Animals demanded food, water and air for growth and development. Many provided the first two, but neglected the third. Without air digestive processes could not go on. Comfortable conditions for cattle were essential, but comfort consisted in plenty of fresh air, as well as reasonable protection from winter's rigors.

The President, Peter White, testified to the efficiency of curtain ventilation for poultry houses. In his poultry houses ordinary burlap was used near the floor, and also above the windows. There always was a current in through the lower curtain and out through the upper, but not so rapid as to cause draft.

JUDGING BEEF CATTLE.

In discussing the question of judging beef cattle, Prof. G. E. Day pointed out that there were two viewpoints that caused differences of opinion. Some criticised from the standpoint of the butcher's block, while others were interested from the standpoint of the feeder or the breeder. Exhibitors should be careful in complaining of the placing of judges. Every animal had strong and weak points, which left it possible for different judges to give valid reasons for various placings. Typical beef animals were used to point out desirable type and choice cuts.

PASTEURIZED WHEY AND WHEY BUTTER.

Pasteurization of whey and the feeding value of whey fat was ably dealt with by Prof. Dean in an address, of which an abstract appears in our dairy department this week. Whey after being properly pasteurized remained sweet, and with proper care of the whey tanks little trouble should be experienced in regard to bacteria. Wooden tanks were difficult to clean. Many factories were providing steel tanks, and pronounced them much more satisfactory.

Q.—How much butter can be made from whey?

Ans.—Our experiments show 2½ to 3 lbs. from 1,000 lbs. of whey. Some have said that they get as high as 8 lbs., but I would conclude that there is something wrong when so much is secured.

Q.—How does the price of whey butter compare with cream butter?

Ans.—Ours sold at 2 to 7 cents less on the market. When there is a shortage of butter buyers will pay almost as much as for ordinary butter.

DAIRY COWS IN WINTER.

In discussing winter feeding of dairy cows, J. H. Grisdale, Agriculturist, Central Experimental Farm, Ottawa, pointed out that the main point was to induce the consumption of easily-digested food in large quantities. This food should be of such composition as would furnish the elements essential to milk production. Cows eat large quantities when palatable food is provided. Succulent or juicy food, similar to June grass, resulted in heartier eating. Some accomplished this in a measure by mixing cut straw and chopped grains, and sprinkling with water. Of recent years silage and roots had become popular. At the Central Experimental Farm a mixture, composed of 8 parts silage, 4 parts roots and 1 part of straw was eaten ravenously.