udder. As far as we know, the mammary secretion is entirely dependent on the amount of healthy blood passing through the glands. Changes in the condition or pressure of the blood influence the amount of milk secreted; hence the necessity for restricting, limiting, and studying the quantity and quality of food given to the dairy cow.

If, then, this be the relation of the milk veins to the udder, it will be readily seen that the development of the veins cannot be overlooked in our estimation of the value of the cow as a milk producer.—[Live-stock

Journa

Dairy Cattle at the Dominion Exhibition.

[From our Manitoba and Western Edition.]

Quebec, Ontario, Manitoba and the Territories each contributed. The first-mentioned Province is noted as the home of many of the best Ayrshires on American soil, and the cream of the three leading herds of that Province was shipped westward, to enter into open competition for the highest henors of the year. These herds were owned by Robt. R. Ness, Howick; W. Watson Ogilvie, Lachine Rapids, and Robt. Reford, St. Anne de Bellevue. S. J. Thompson, St. James, Man.; J. C. Pope, Regina, Assa.; Robt. Hunter & Sons, Maxwell, Ont., and W. M. Smith, Scotland, Ont., also measured swords with these noted Eastern veterans of the show-rings, and although they did not capture as many prizes as the breeders of more experience, yet they gained in general knowledge regarding the art of fitting, and the necessity of special bloom when showing at leading fairs. Geo. Steel, M.P.P., Glenboro, Man., acted as judge, and it is needless to say that his duties were difficult in the extreme. Being able to correctly place the awards on dairy bulls is something which few men can do, so that although the judge may not in every case have placed the distinguished badges exactly where they ought to have been awarded, yet his decisions on the whole were very satisfactory.

Five aged bulls lined up, forming the first ring, and after careful handling, the six-year-old Duke of Clarence of Barcheakie (imp.), from the Howick herd, was given the red. He carried his form extra well for one of his age, being still a splendid looking, typical Ayrshire, and a useful sire. Robt. Reford's Howie's Fizzaway got second, and Smith's Polar Star, winner of second at Winnipeg last year, followed. Challence of Prairie Home, from the St. James herd, winner of first last year at Winnipeg, had to go unplaced; also the Ogilvie entry, Black Prince of Whitehill (imp.). The last-named is a firm, large bull, of good dairy type. No objection could have been taken had he found a place inside the winning circle. Last year, both at Toronto and Ottawa, he won first and diploma. winner of first in the yearling class at the present fair is a son of his

Numerically, the two-year-olds made one of the weakest sections. However, the sweepstake bull, King's Crest, owned by R. R. Ness, was found in this bunch. He is an impressive-looking sire, very masculine, yet not coarse, a typical Ayrshire show bull. Ogilvie's Royal Warrant of Lessnessock (imp.), had to be content with the blue ticket. He is a handsome, smooth-shouldered bull, equally as good in general conformation, and slightly better in thigh and hind quarters, but not quite so masculine. Castlehill, sired by Napoleon of Auchenbrain (imp.), from the Assa. herd, filled t beautiful bull, of fine breed character. Pilot of Glenora, from the Lachine Rapids herd, an excellent son of the unplaced Black Prince of Whitehill (imp.), led in the yearling bull section. Reford's Right Away of St. Annes made a strong second, closely followed by Robt. Hunter's silky skinned white youngster.

Hunter's entry headed the calf ring, and is a tidy good handler, with leanings towards the old type. Castle Glen of St. Annes, owned by R. Reford, and sired by J. C. Pope's Castlehill (winner of third in two-year-olds), won the blue ribbon. He is a young bull of much promise. King's Own, from the Howick stables, was placed third. He is a very growthy fellow, with a capacious dinner-basket, yet good general dairy type, considerably, larger than his more successful rivals; however, a little harsh to the touch, nevertheless worthy of a higher placing than he received.

The winners of the calendar year section were much alike in conformation, quality and color, all good ones, of up-to-date approved type. Ness won first with Speculation (imp.); he is a smooth, deep-bodied, young bull, strong in constitution, and possessed of superb handling quality. Mr. Ness intends keeping him for his stock bull. Ogilvie's entry got second placing;

Hunter's bringing up the rear.

Cows four years and over made a sensational showing. Fourteen competed, and as they faced the judge, truly it could be said that the cream of the continent stood before him. Ness' beautiful cow, of Pan-American fame, although one of the number, was not in best condition for show purposes, being due to calve in about a month. She has typical dairy form, great constitution and wonderful capacity, which would assist her in making records at the pail and churn. She has been well cared for, and has profited by it, to the extent that she appeared a trifle beefy, yet, withal, ex-

ceedingly smooth. A great many Ayrshire cows should be faulted for the smallness of their teats, and in this respect the Pan-American prizewinner is not perfect. Utility nowadays is being considered, as never before, in all branches of live-stock progress, and the time has come when breeders of Ayrshire cattle should pay more attention to increasing the size of the teats of the breed. After considerable deliberation, Ogilvie's Carsegowan Maud Bell (imp.) was placed first, and later won the championship awarded by the Canadian Ayrshire Breeders' Association, for best female in milk. She is a handsome young cow, almost faultless in form and finish, but scarcely enough of her for her exalted position. A little more size and constitution might reasonably have been expected in the leader Lady Bruce of B., from the Howick dairy, got second honors. She has first-class dairy conformation, and showed to good advantage. Reford's White Rose of Fairfield Mains was the last of the fortunates. She gave evidence of being a phenomenal milk-making machine when in best form, but is getting up in years. Some of the cows showed to advantage as regards full udders and swelled milk veins, whereas others were not in condition to do themselves or their owners justice.

The three-year-olds did not make nearly so strong a showing, largely owing to not being in milk. Ogil-vie's Bright Lady of Glenora led, closely followed by Ness' Moss Rose of B.; Smith's Duchess bringing up the rear.

The two-year-olds were of mixed conformation. A very showy heifer, with a grand dairy front, but rather lacking in depth from loin to flank, was placed first. She will require to develop a large udder to give her the best of dairy shape, but should she do so, will make a splendid show cow. She is imported, and belongs to the Lachine Rapids herd. Two excellent daughters of Duke of Clarence, the present stock bull of the Howick Ayrshires, were placed second and third. They are capacious, and full of quality, and give promise of developing into dairy performers of a high order.

The yearling winners were very much of the same type, strong, growthy, and full of dairy character and superb quality. Duke of Clarence sired the winner, while Douglasdale (imp.) sired the two Ogilvie heifers which got second and third.

Nine beautiful heifer calves competed, R. R. Ness winning both the red and blue with Duke of Clarence calves, and Ogilvie third money, with another of Douglasdale's get.

Ogilvie, Ness and Reford won in order named with herd, bull and four females, any age. With herds under two years, the placing was Ness, Ogilvie and Reford. S. J. Thompson, of St. James, Man., won the herd prize for Western-bred, and Ness and Ogilvie for two calves under one year.

JERSEYS AND GUERNSEYS.-There were no Guernseys on the grounds, but the Brampton herd of Jerseys, owned by B. H. Bull & Sons, made a grand showing. Blue Blood (imp.), sweepstake bull at Toronto and Winnipeg last year was again ready to battle for supremacy. splendid show fit, and by many is considered the best show bull of the breed on this continent. Oakland Bobs, owned by J. C. Russell, Winnipeg, showed against him, and although a good bull, was not in the same class as the Ontario winner. Most of the sections were filled, for Messrs. Bull had a large and superior herd at the fair. Just to give our readers who were not at the exhibition a slight idea of the class of stock which these Brampton breeders send into the ring, we shall make mention of a few. The first-prize yearling bull was Imp. Fereor, a bull of great promise, sired by Fereor. Six of Fereor's daughters sold at Cooper's sale last May at an average of \$645.00. prize aged cow, Una Massena, is a beautiful type of dairy cow, and an excellent performer; was bred by J. C. Snell, and descended from the wonderful cow Mas-Brampton Maid, winner of first in three-yearold section, also won first for best female in milk. She is a grand young cow, of St. Lambert breeding, with an immense, well-set udder. The first-prize two-yearold won highest honors as a yearling at Toronto last season. She is a daughter of Brampton Monarch The winner of the red in the yearling ring was bred in England. She is a daughter of the noted bull, Golden Fern's Lad, the bull that sold at auction when nine years old for \$2,250.00.

DAIRY GRADES.—There was a fairly good showing of dairy grades, Jerseys and Holsteins predominating. Geo. Steel, M.P.P., acted as judge. Bull & Son got first and third in aged cow section, with a beautiful pair of Jersey conformation and almost full blooded, and Potter's noted grade Holstein, winner of first at Winnipeg and Brandon last season and first at Killarney this year, was placed second. The Brampton herd got first placing also with three- and two-year-olds, Herriot following with Shorthorns and Holsteins. The order with yearlings was Potter, Herriot and Bull. The last-named took all prizes with calves.

A Valuable Journal.

Dear Sirs,—The Farmer's Advocate and Home Magazine has been coming to our home for a great many years, and I believe it would be impossible to get along without it. There is news in it to suit all classes and ages of people.

Summerville, Ont. M. J. SANFORD.

Licensing Not the Remedy.

To the Editor "Farmer's Advocate":

Sir,—Licensing cheese and butter factories is a subject deserving serious consideration, involving, as it does, a radical change in Canada's most important industry.

In looking back over the history of the dairy industry, it must be very apparent to everyone that great progress has been made, not only in improving the sanitary condition and equipment of the factories, the quality of the cheese and butter, but also in developing a very intelligent class of makers, as the result of education and competition.

The chief benefits claimed for the licensing system by its advocates are a better sanitary condition of the factories, and, possibly, a greater uniformity in the quality of the cheese and butter. both of which, I think, can be attained by the means we already have at our command. If factories were licensed, the various instructors appointed to give instruction to the farmers and makers would likely be called upon to decide the granting of licenses and see that all conditions were complied with. They would have to receive special training in the different methods of disposing of sewage to suit the different localities, and in remodelling and insulating the factories. It would also be their duty to see that the factorymen complied with all the rules of the license.

The instructors would, no doubt, have more authority than at present, but I doubt very much if better results would be obtained. Under the present system of engaging them, instructors might often be appointed in whom the factorymen had very little confidence regarding their ability, and the result would be constant friction and disagreement.

If the local sanitary inspectors, whose duty it is to inspect cheese and butter factories, as well as other premises, were qualified for the work, the licensing of factories would never have been discussed, and, inasmuch as they are not qualified, I have frequently advocated appointing the present instructors as sanitary inspectors. If this is not practicable, or if it would tend to cause friction between the instructor and maker, the end in view could be attained by having the Department of Agriculture request the present instructors to inspect each factory carefully, and report to the chairman of the Board of Health for the district, together with suggestions for remedying the Action would then be taken at once, and the factory premises cleaned up and some system of disposing of the sewage adopted. This plan might be carried still farther and the local sanitary inspector be requested to visit farmers who were supplying an inferior quality of milk and prevent them from handling their milk or cream in such a way as to endanger the public's health or injure the quality of the cheese or butter, just as the official of the town or city Boards of Health now visit the farms of those supplying milk for town or city consumption to see that the conditions at the farm are conducive to a good quality of milk.

To improve the factory buildings by the licensing system would be very difficult, as under the present system of curing cheese at low temperatures a number of factorymen whose buildings are poorly insulated have adopted the system of shipping their cheese every week to buyers, who hold them in properly-insulated rooms and at suitable temperatures to secure the best results. way they are enabled to turn out a good quality of cheese and obtain as high a price as other factories much better constructed, where the cheese are held for a longer time. Very often the sanitary condition of a factory does not depend so much on the location or style of the building as on the maker in charge. The best factory in charge of a careless maker would soon become unsanitary, while a tidy, progressive maker is often able to keep old, unsuitable factories in a good sanitary condition.

The licensing system might involve joint-stock companies in serious trouble, for, after having put the factory in the best possible condition, they would have to depend on the maker for keeping it so. Should he prove careless and untidy and the license be cancelled in the middle of the season, the loss and inconvenience to the company and farmers would be very great, so that in justice to factory owners, the makers should also be licensed.

Then, if it is the best interests of the industry that makers and factories be licensed, I would advise beginning at the root of the trouble, and license the farmers who supply the factories with milk and cream and whose premises are quite as likely to be unsanitary as the factories, and who are just as responsible for the quality of the cheese and butter.

Our present laws forbid farmers furnishing factories with milk or cream unsuitable for the manufacture of the finest quality of cheese or butter. The local boards of health are appointed for the purpose of seeing that all premises within their districts are kept in a sanitary condition, and cheese and butter makers unable to manage