The Dairy Herd Sire.

It has been considered by a great many dairymen that the sire is half the herd. Some breeders vary this by saying that a good sire is half the herd but a poor sire is all the herd, meaning that no matter how excellent the cows may be, the effect of mating with a poor sire will be so marked as to practically destroy the value of past breeding in the females. At any rate it is safe to say that the bull is important enough to be selected with the greatest of care and with due regard for the fact that he is to leave his stamp upon the offspring from all the females in the herd. As a matter of fact, the use of a good bull will improve the herd much faster than good females, because one can select a bull of outstanding merit without much difficulty and one that will not cost a sum out of all proportion to his worth as a sire, much easier than it is possible to gather together even a few females of equally good breeding.

This matter of good breeding is all important in the selection of a herd sire. The scrub bull is the bane of the dairy industry and is a much more pernicious evil than the boarder cow, for while it is possible to cull out the boarder and dispose of her to the butcher, before she will have had time to injure the productive power of the herd through the addition of daughters no better, or even worse than herself in point of profit, the problem is not nearly so simple where the scrub bull is concerned. This fellow will have been in service for a considerable length of time and will have transmitted his mediocre or inferior qualities to a large number of offspring before his inferiority is realized by the breeder who has not studied his ancestry. Too many of our dairy herds are replenished with young stock on the principle that the sire need only possess masculinity to justify his continued use. It is quite true that the superiority of a good bull is not always obvious, and that there really seems, to many men, to be no reason why there should be hundreds and even thousands of dollars difference in the price of two animals both of which may look equally good to the eye. The indisputable fact remains ,however, that these price differences do exist, and for the simple reason that breeders of long experience have found that there is a very real difference in value as well as price. Buying a bull to head a dairy herd is an investment and must be made to pay. The experience of breeders seems to agree upon one point in this regard, and this is that the bull must be better than the females in the herd in point of breeding. There does not seem to be any object in breeding grade cows to anything less than a pure-bred bull, if for no other reason than that pure-bred bulls of at least fair breeding can be purchased at serviceable age, or just under, for very moderate sums. Sometimes proven sires can be picked up from known breeders of good repute who are forced to use another animal in carrying out their ideals in breeding and although such animals are usually fairly well along in age, their performance is known and uncertainty as to their prepotency and other breeding qualities, is eliminated. When the females in the herd are among the very best in the country the problem of selecting a suitable herd sire becomes much more difficult. Under these circumstances it is almost impossible to follow the general rule of selecting a bull better than the females. At the same time, it is absolutely imperative that the sire be the best obtainable, since to allow the offspring from the herd to show anything but the very best blood lines and a combination of the best dairy quality, would be to defeat the very object for which a herd of topnotch females has been built up. Judging from the action of the leading breeders of dairy cattle under such circumstances, price is no consideration. When $30,000 is paid for a half interest in a yearling bull, and $106,000 for a bull calf at auction, there must be a strong possibility of securing a return from the investment, or such sums would not be offered. It does not make any difference that the men who pay these figures for animals are usually very wealthy; these instances are merely exaggerated examples of what is being done regularly by far-sighted men who realize that it is impossible to get something for nothing, and that to have a worthy sire at the head of the herd one musy pay a price commensurate with his value. Theoretically the best is none too good for any herd, but there are many exceptions where prudence and financial problems make it necessary to be satisfied, for a time at least, with a less expensive animal. The danger here lies in exercising false economy and buying too cheap a bull, but this policy has already been condemned.

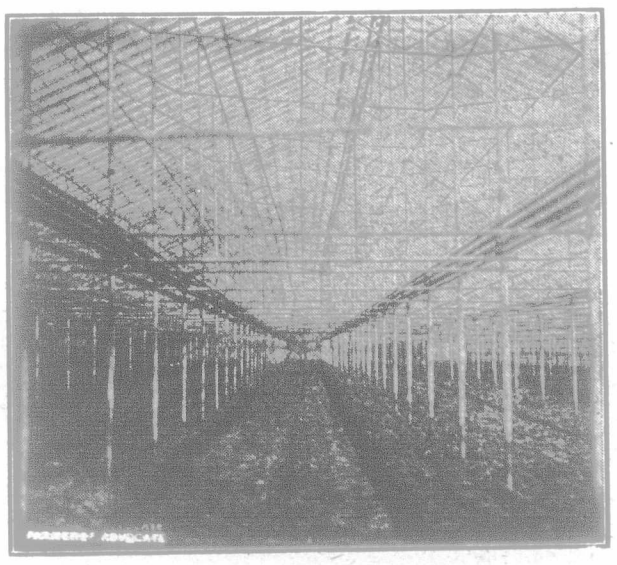
Blood lines are of the greatest importance in the selection of bulls. One of the best known Jersey men on the continent wrote recently, "We have never become interested in a bull that did not 'make good,' if he lived to an age of usefulness. I attribute this success with our bulls, not to a superior ability in judging of type or prophecying prepotency, but more to a thorough investigation of their inheritance. I believed in the principle of 'a good individual from a great dam' before it was taught in the schools." This man in later years determined upon a certain Jersey sire as "the greatest sire the Island of Jersey every produced," and spared no pains to acquire possession of him, although the bull was nearly nine years old. In spite of this advanced age he says, "We had five years' use which well repaid the cost." This testimony was the result of forty-four years' experience and is worth consideration by the owner of any dairy herd requiring a herd sire on the place. Aim for the best; if the best is beyond your reach, get as close to it as possible. In other words, Emerson's maxim, "Hitch your wagon to a star," is true of dairy cattle breeding as well as any other pursuit in life. Remember that the sire is at least half the herd, and that profit in dairy farming increases as the cows possess capacity to produce milk and fat from large quantities of food consumed in excess of that required for maintenance. After all, this is essentially what dairy breeding is.

HORTICULTURE.

Faith in the fruit industry will be rewarded later on.

How about those bulbs to brighten up the home next spring. It is not too late to plant them yet.

Take care to protect young trees from mice and rabbits. Fruit trees several years planted are too valuable to lose through neglect.



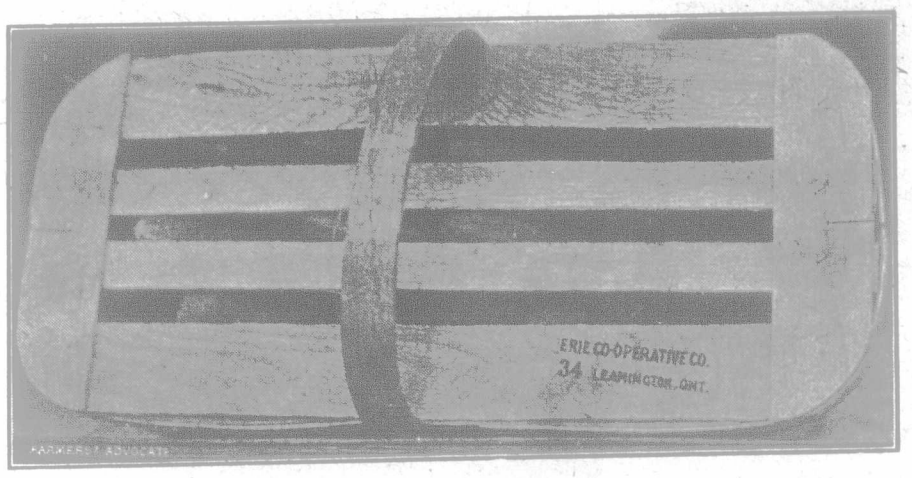
The Inside of a Large Greenhouse in the Leamington District.

How is co-operation faring in your locality? Did the war kill it among your fruit-growing neighbors? Keep it alive on one farm at any rate.

Fall plowing of orchards will destroy a great quantity of insects where the orchard culture has been unbalanced, it may also serve to increase the amount of winter injury.

Experience has many times proven that it pays to mulch the strawberry patch. A good coating of straw or strawy manure should be applied just after the ground freezes solidly enough to bear a wagon.

Now that help is so scarce, would it pay you to spray the orchard this fall? The dormant spray has been neglected for a long time on some orchards, and it will certainly not be applied to these orchards next spring.



A Basket of Well-packed Cucumbers.

A check is placed on each grower by putting his number on each package he ships.

How Essex Truck Growers Co-Operate.

Ontario stands out head and shoulders above the other eight provinces of the Dominion in the matter of growing fruit, both for variety of suitable climate and size of the industry. As in every other branch of agriculture, there are certain parts of the Province more particularly adapted to fruit growing than others. Some districts specialize in growing hardy apples, others produce pears and others tender fruits, such as peaches, while still others incline to small fruits. Down in Essex County, about the town of Leamington, there is a section of country that has specialized in truck crops for the wholesale market, while, in addition, they grow nearly all other kinds of fruit except grapes. We were told recently that there is only one commercial vineyard, and that a small one, in the whole of Essex County. Leamington is situated very favorably for the production of early crops of tomatoes and other truck crops, and for this reason a business has been built up around the growing of these crops and tobacco that rivals anything which can be said of any one of the fruit centers in the far-famed Niagara district.

However much one could say about Leamington as a fruit and vegetable district, it is not about the district itself that we wish to write, but about a co-operative concern there which is rapidly developing under the name of the Erie Co-operative Company. This Association is a live one from start to finish, if appearances are indicative of anything at all. Its growth has not been rapid, purposely, until the last few years and there is more or less of a history connected with it which cannot be detailed here, but which would be of interest to students of co-operation. Like one or two other fruit associations now in existence in Ontario, the Erie Co-operative had a stated number of members which was not increased from year to year. In 1915 another association was started in the Leamington district and named The Leamington and Western. This first year for the new association, which had a membership of 18 or 20, was the worst in the history of the district and little, if any, money was made by either association. In spite of the unfavorable start, however, the Leamington and Western increased its membership the following year to 28. During this year, 1916, it developed that the Erie Co-operative and the Leamington and Western were fighting each other for all they were worth, and instead of raising prices to the growers they were each slashing prices to bed rock and cutting each other's throats as fast as possible. The members of each association began to see this readily enough, but about a year's talk and discussion was necessary before commonsense predominated and an amalgamation took place. This was finally accomplished in the winter of 1916, and instead of two associations with 18 and 28 members each, together with a duplication of expenses all around, there was now one association with 46 members. This membership steadily increased until at the close of 1917 there were about 160 members, and this past spring a further amalgamation took place with the Ruthven Cold Storage Co., another co-operative association a few miles distant with 22 members. As it stands to-day, therefore, the Erie Co-operative Co., is a truly co-operative association with 180 members, headquarters at Leamington, a branch at Ruthven and strong possibilities for others next year. The company owns fruit houses at Leamington and at Ruthven and a cold-storage plant at Ruthven valued at $4,000. The latter contains an ice house, two frost-proof storage rooms, and a common storage for grain, baskets, etc.

Each member of the association has one vote only and subscribes for one share on joining, the value of which is $100. He pays into the association only $25 and is not likely to be called upon for further payment since the association is paying its way handsomely, but there remains, nevertheless, a handsome reserve of more than $12,000, which can be called in if need arises. The new member agrees to abide by the by-laws and regulations of the association and becomes entitled to all the rights and privileges of the association. At the close of the year eight per cent. interest is paid on the paid up capital and any surplus is divided among the members pro rata, or, according to the amount of actual business each has done during the year with the association. One of the rules of the association that is strictly enforced is that all produce sold wholesale by any member be disposed of through the association, or, in fact, any produce sold by him through any channel must go through the association. The members are paid by cheque every two weeks for the produce handled by the association and the cheques for the first two weeks in July amounted to $60,000. Without any account being taken of the business being done in onions, the produce business of the association for 1918 will run close to $250,000. Onions alone will amount to about $100,000, and supplies purchased and sold to members will add about $75,000 more to the gross total for the year. One of the largest days' sales this year was $15,000, without counting produce sold on commission. In 1915 the business of the association amounted to only $25,000; in 1916 it was $52,000, and in 1917 it had risen to $120,000, according to figures given by W. R. Dewar, General Manager and Salesman.

The big business of the association, as was mentioned before, is with the truck crops and of these, field tomatoes make up about 75 per cent., with a total value close to $150,000. As many as 13,000 baskets of field tomatoes have been shipped by the association from Leamington in one night, an amount equal to about eleven minimum cars. About 400 minimum carloads of produce had been shipped from July 8 to the time of our visit, late in August, and were distributed from Edmonton to Halifax. In the busy season one car each day was sent to the Maritime Provinces, two to Montreal, two to Toronto, and two for local points in Western Ontario. About thirty cars of tomatoes had gone West of Winnipeg by express. A special fruit train had been put on, beginning July 8, and called at Leamington about eight in the evening to pick up the days shipping. In addition to field tomatoes, large quantities of early cabbage, sweet corn, cukes, and pickling onions are shipped as well as melons and hot-house cucumbers. Of the latter there are from $25,000 to $50,000 worth shipped each year, while up to two years ago there might be as many as three or four cars of melons leave Leamington in a day. The last two years have not been good