

## Disappearance of Unimproved Blood by the Continuous Use of Pure-Bred Sires.

Generations.	Sires	Dams	OFFSPRING			
	Per cent of Purity	Percent of Purity	Per cent of Purity		Per cent of Unimproved	
1	100	0	50	1/2	50	1/2
2	100	50	75	3/4	25	1/4
3	100	75	87.5	7/8	12.5	1/8
4	100	87.5	93.75	15/16	6.25	1/16
5	100	93.75	96.87	31/32	3.12	1/32
6	100	96.87	98.44	63/64	1.5	1/64

It has been estimated that approximately fifty per cent. of those engaged in cattle breeding are still using a grade bull. It is true that in some districts, especially in the newer settled parts of Northern Ontario, there is not a sufficient number of good pure-bred sires available; in those sections there may possibly be some excuse for those so unfortunately located. In many such cases provision has been made by the government for the supplying of sires on reasonable terms and at prices within the reach of all. With real good bulls of satisfactory breeding selling at less than \$500 it would appear that very few, if any, farmers need resort to a grade or scrub sire. The price mentioned is not beyond the reach of all and there is no question the results from the use of such a sire would warrant paying that figure.

Considerable has been said within recent years relative to the necessity of Canada increasing the output of her live stock and livestock products. What is more important is to improve the quality. It is not

saying too much that without adding one animal to what we already have it would be possible to increase the output from farm stock to the extent of the eight figure mark and to accomplish this by adopting the slogan already expressed by our friends across the line.

The purpose of all breeders of pure-bred stock should be to improve the ordinary commercial stock in the hands of the average farmer. This constitutes the outlet for the greater part of the registered stock and it should take the form of the sale of good sires to be used on grade herds. This looks like better business both for the breeder of high class stock and the man engaged in supplying stock for the open market than the establishment of a large number of pure-bred herds in the hands of every farmer. It is one of the most encouraging signs that breed associations appreciate this fact and look to the time when every farmer has in use a pure-bred sire.

The improvement and development that has taken place in livestock since the eighteenth century has been due to the breadth of vision and inspiration of a few outstanding men. If the slogan as suggested in the opening sentence of this article receives the support that it warrants the next twenty-five years will witness a greater improvement than has been achieved during the past two hundred years. Give the good pure-bred sire an opportunity to accomplish this.

