

laws of heredity will quite easily understand why the outcrossing methods cannot lead to any great success.

There is no question that many breeds have been made by the method of in-and-in breeding, which means the mating of nearly related animals; but once a breed is established there does not seem so much need to practise it to any great extent. It is decidedly useful, if one procures an outstanding sire, to mate a few nearly related ewes of the same family and type, the progeny of which, if successful, would be very valuable; but to continue would, I think, only be courting trouble. Before attempting to inbreed it is necessary to have an intimate knowledge of the history of the animals to be mated. I have tried mating in this way with varying success; in one particular instance the result was a decided success.

Line-breeding with distant strains of the same blood is the ideal system. By selection leading faults can be eliminated, family lines can be established, and a flock, if large enough, can be carried on a number of years on these lines improving all the time. But there comes a time when, if some fresh blood is not introduced, the young sheep will be slower to mature and harder to get into condition, and will show less covering on their points and a general falling-away in vigour. I had this happen with my Lincoln flock, and if a flock is allowed to go too far it takes quite a time to bring it back to normal. To avoid this happening, a safe method is to purchase a few outstrain ewes, use the home ram on them, and if the results are satisfactory use the half-blood through the flock. It may be that selection has something to do with slow maturity after a flock becomes closely bred for some years. A good sire in either the Lincoln or Romney breeds must have a lasting fleece—*i.e.*, it should grow good wool until four or five years old. A sheep which will carry sound wool until that age is invariably a very firm-fleshed animal and free from excessive fat. These animals are a little slower in coming to maturity, and the more you inbreed them the more you intensify the slow-maturing qualities.

Line-breeding with distinct strains of blood is no doubt a safe method for the beginner, but the great difficulty is to get a number of separate strains of blood of equally good quality and alike in type to start with. It would take years to bring a flock bred in this way to anything like evenness.

To be successful at stud breeding a person must have a natural gift for observing the good and bad points and the general characteristics of each animal; by so doing he will know all his best animals by sight, which is of great assistance when dealing with the flock.

The safest method the young breeder can adopt is to make up his mind on the type of sheep he would like to breed, select his stock from the breeder whose sheep come nearest to this ideal, and continue doing so as long as the parent flock continues to be up to standard. As time goes on, if he is a keen observer of his animals, he will be able to analyse them at a glance. When this stage is reached, success should crown his efforts. Suitable climate and soil for the particular breed are essential; good judgment in selecting and mating, and good judicious feeding are all necessary before success can be obtained.