

It has become an established fact that the Pure-bred Shorthorn can make superior progress both in growth and condition, to common bred animals, and they shall both have the same pasture, or the same stall feeding. This superiority becomes, even strikingly apparent, with a cross or two, of the pure shorthorn. It shows itself in many ways. The bright eye, the docile temperment, the rich hair, and the mellow touch;—and even when turned out in the treacherous sunshine of a March day, how vigorously they go to work on the rough herbage left from the summer grazing. Leaving out of the question the "loose boxes all the year round," as incompatible with the position of those who expect to live by farming; it is better for the health and constitution of their stock, to have a few hours out on grass when the weather permits, and when they return to their yards, stalls, or boxes they enjoy them better;—confinement is more easy after such exercise.

It ought to be a point in every breeder's arrangements to reserve some *old meat* on a favourably situated pasture for this especial purpose; favourably situated as regards shelter from the keen winds of the early spring months; not merely with the view of saving in-door keep, but also to combine with that economy, the benefit of change and exercise, so necessary to the vigorous growth and the future welfare of young Shorthorns.

Indeed young stock requires the best care the premises will afford, bestowing upon them. Symmetry and style are sacrificed by the starving process so much in practice; and are as certainly secured by liberal and generous treatment. It may not be possible for all farmers to afford extra keep to all their stock; but the next thing to do is to give all the extra keep they can to their calves and carry them well over their first year. Once well started they seldom if ever "look behind them again;" but onward they go with profit and pleasure for their kind owner each succeeding year. Then again how much less liable such well started animals are to all the ills that cattle are heir to. Could any better inducement be held out than this? in favour of the liberal treatment of the young; Nay, indeed all ages, may fairly be included in this particular, for it is one of those circumstances which would gain from any insurance company, some such name as "*private insurance against risk.*"

Now if a small "Linseed Cake Bill" will effect such an insurance;—and it may be very confidently stated that it will;—then the Cake can be proved "a double debt to pay;" growth, condition, style, symmetry, constitution, early maturity, and above all health; these and some other concomitant advantages are certain to flow from the use of a little extra food; food that is richer in those particular

elements required in the more rapid development of the bone and muscle of growing stock.

It is not the object of this article to teach the chemistry of this important subject; but it may not be out of place to say, there is a point in keep, where growth and improvement would inevitably stop; turn that course well and safely, and our machines (our cattle are nothing less) will carry us on our journey with light hearts and happy minds.

What can a few dollars spent in extra keep do? They can go three times round the calf, whilst they only go once the cow!

In other words three calves can be permanently improved in symmetry and constitution whilst one cow would be improved in condition by the same amount of extra keep. Symmetry can never be added to the full grown animal; it must be secured in youth.

DIVIDING SWARMS.

No certain rule can be given as to the right time for dividing colonies, as seasons are so different and localities so unlike with respect to the putting out of blossoms. As a rule, I find that when fruit blossoms early, and good weather prevails during its blossoming, it is safe to expect early swarms. No new colonies can safely be made before drones appear as on them depends the impregnation of the young queen.

It is always best to choose a time when the nights are warm, or the young brood may suffer after so much surplus population is taken from the hive.

Those who have used moveable frame hives for any length of time will have become familiar with various ways in which colonies may be divided; such need no aid in the matter but a word or two of caution may be "in order." Never expect to benefit a colony that is not doing well by making two of it; unless a hive is very strong in numbers and in all ways prospering, do not divide it. Generally such colonies may best be made vigorous by taking away their queen and replacing her by a young one.

Never divide when honey is not very abundant.

In making the division, whatever way you practise, be sure to have the main part of the worker force of the colony with the queen, leaving the hatching brood with few old bees in the old hive. To do this easiest, it is well to have the queen in a new hive on the old stand, while the old one is removed some distance away.

It always pays to rear queen cells eight or ten days in advance of swarming time, so as to give the part of the colony left queenless a queen cell nearly mature, thus saving them much time.

If the greatest yield of surplus honey is the object, it may best be secured by making no more than one new colony from each one in a season; where little fall pasturage is found, it is generally best to be contented with securing one new colony from two old ones, thus:

Take three frames of comb, containing brood and stores, from a good colony, replacing them by empty frames; put them in an empty hive and set it where the one from which the frames were taken