

lationship can hardly be said to exist between them; and in the processes of combination and decomposition, nature holds in scorn our attempts to follow her steps, by our utmost investigations, into the operations of the grand laboratory of the universe.

Improved Durham Calves—Thorough-bred.

1848.



THE Subscriber not intending to rear his BULL CALVES of this season, will be able occasionally to supply Breeders with a few Calves of *Herd-Book Pedigree*, at £15 each, three months old. Early application is recommended.

ADAM FERGUSSON, Woodhill,
Waterdown P. O., C. W.

NOTE.—The Calves will have been got by *Althorpe* by *Symmetry*, dam *Non Pareil*; or by *Ea. Laf Durham* by *Duke of Wellington*, dam *Non Pareil*.—SEE *HAND BOOK*.

For Sale, the roan Bull *ALTHORPE*, two years old, who gained the first Premium at the Provincial Show in October last.

Newcastle Farmer.

COBOURG, CANADA WEST, JULY 1, 1848.

The Hay making from herbage plants, Clover, &c., is now, or ought to be, in full operation, as being so totally distinct from the natural grasses from their greater breadth of leaf, size of stem, and great succulence, they require cutting before their most valuable qualities are lost, and the leaf and stem, their main bulk, is dried and withered by a supply given to the ripening seed; for although some portion of weight may be lost by early cutting, still the value of the provender is increased in a greater ratio than any loss sustained by a weightier crop. This, of course, merely applies where the clover, &c., is nearly pure and but a small admixture of timothy or other grasses.

It is our opinion that clover is best sown alone where a permanence of pasture is not required, which can scarcely be obtained on land really suitable to clover, requiring as it does a soil of a light warm nature, to be most productive, and on which timothy is not sown to advantage, that grass requiring a much moister soil, where clover would in all probability be killed out the first severe winter; and we believe clover culture to be most profitable; not more than two cuttings should be allowed, and to be fed down the second year, or immediately broken up for a spring crop, as it is obvious that where the plant fails, its place is taken by weeds or wild grasses of the worst description for the farmer, which cost more to eradicate than the loss sustained by a meagre scanty crop. We have often regretted to see fine fields left untouched until the leaves have assumed a russet appearance, the flowers have faded and dropped from the stem, from the withered and dried state of the plant; and then the evil is consummated by an unnecessary exposure of the crop upon the field, the leaves are deposited on the land merely to form a manure for the succeeding crop, and the stalks, as withered and stringy as flax stems, are carried to the barn, when they are as useless as bad pea straw, and as innutritious as pine shavings.

It has often been a matter of surprize to us that there should be a difficulty of substituting another variety of the trifolium, and that the cow clover, or cow grass, is not more generally used, which comes into flower a fortnight later than the red clover, and is consequently better adapted to sow with our most valuable grass, "the timothy." We find 'American

Cow Grass Seed' sold in the British markets, and is in general demand in most of the English counties, even where the highly prized rye grass is in good repute; but as we cannot substitute any grass for the timothy, if we must mix the herbage, our only chance seems to be the cow grass; we believe it is not so prolific although very similar to the red clover, and the seed is less abundant and more difficult to thrash out, but the machines will obviate the last difficulty.

We have always doubted the necessity or propriety of sowing any mixture with the timothy, as, if sown in good season in the fall, with either Wheat or Rye, a good crop may be anticipated.

An excellent article "on running out of varieties," from *The Albany Cultivator*, which so entirely coincides with our view of the subject, will be found in our present number. We believe it will tend to correct some erroneous ideas on the subject, and prevent some unnecessary trouble.

It must be sufficiently evident that no radical change can take place in any plant not grown from seed, as the potato, artichoke and cluster onion, &c., since a cross or hybridism of a mixture of two or more of any description can only be produced by the impregnation of the flower, and so long as the propagation is not continued from the seed, the character of the bulb or tuber itself must remain the same.

We would not be understood to say there can be no change in the quality of the esculent; we believe the contrary, a potato which would be dry and mealy on a particula and suitable soil, may, by continued growth on soil of another description, become close or watery, and perhaps in particular locations, be almost unfit for human food; but this may be remedied by a return to a soil suited to its peculiar character. We have reason to believe that a larger quantity than usual has been planted this spring, which has been the cause of the scarcity of seed; and that the rot in the cellar from the prevailing disease of the last two years has not been so general as heretofore.

We must confess we have a fear that the use of a large proportion of manure applied immediately to the seed in the drill, inducing a luxuriant and succulent vegetation, will tend to perpetuate, or at least to favour the disease, supposing, as we do, the cause to be atmospheric, and that luxuriance rendering it peculiarly liable to suffer more readily. No doubt a larger crop is generally the result of such an application of manure, but if the produce be unsound, the practice is bad policy.

The hoe crop generally, will now need the most vigilant attention on the part of the Farmer—'no stirring of the land, no crop.' The cultivator, hoe and plough, must be put into operation, or vile weeds will blast the hopes of the grower. A treble loss is sustained by neglect, weeds will take the nutriment from the cultivated crop, they will seed and lay the foundation for a future annoyance and loss, while if cut over and buried up they serve as a nourishing manure.

We have thought that Potatoes, when earthed up so close as that an apex or sharp ridge is formed, that much benefit is lost in a dry season, by the rains passing off too rapidly thro' the deep furrow without communicating the requisite amount of nourishment to the crop; we always prefer leaving the ridge partially flattened.