

practical part of his subject, and his advice is worthy of deep attention.

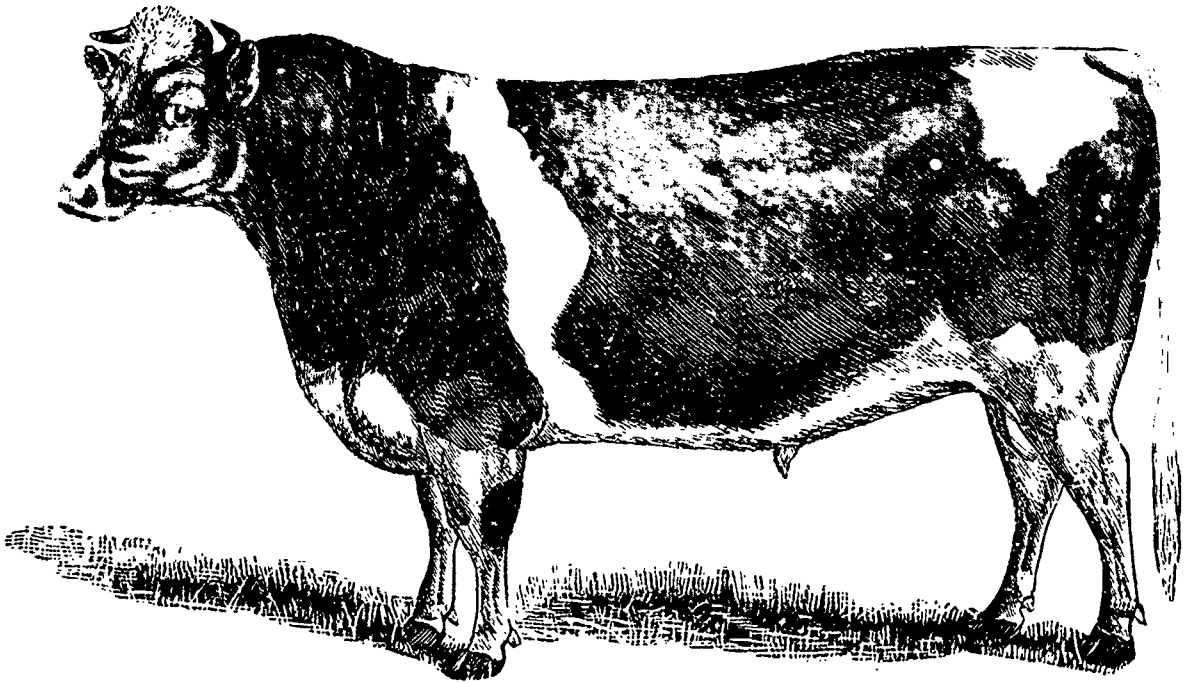
"What we have realized with others are

THE FOLLOWING FACTS :

That permanent pasture, after the first year, is the earliest of most green things, some of the grasses and the lucerne clover growing under the snow—if deep and late in going(sic). The meadow fox tail leads in earliness, and, with the English rye, orchard, and lucerne, offers a full bite even for cattle early in May; these are followed by meadow fescue, blue grass, red top, yellow oat, and timothy in regular order, so that with the five clovers the animals are presented with a succession of different crops throughout summer and right into the snows of November—never bare and always fresh. The meadow fescue may be termed the "general purpose" plant of the mixture, no other is equal in an average of good

the meadow-fescue, the foxtail excepted, and it is very superior as regards its nutritive qualities. Its habit is perennial, flowering towards the end of June, and growing to the height of 1½ to 2 feet. It thrives best on rich, moist soils, but is suited for and succeeds very well on all good land, and is relished by all sorts of stock. My own impression is that on sands and on stiff clays, the meadow-fescue would not succeed; but in every other case, on drained black soils, and on good loams, either clay- or sandy-loams, in the neighbourhood of towns, where dung is plentiful, on all soils; the meadow-fescue should form a large part of the permanent grass-seed sown.

The professor speaks of the English rye-grass, but he should have pointed out that for permanent work the *lolium perenne* should be employed. The common English rye-grass, which we always sowed with red-clover in my part of England, came ready to mow for hay at the same time as the



No.1—Imported 2 years old Holstein-Friesian Bull, "Mars Ellis" No. 661. H. F. H. B. Property of F. N Ritchie, the Manor Stock and Dairy Farm, Ste. Anne la PÉrade, Prov. of Quebec.

things; never coarse, always in leaf, a good spreader, and a good neighbour; other grasses could be dispensed with—the meadow fescue never. Animal health is better where a variety of plants exists, though England has found, in some instances, that heifers grazed alone upon such pasture are more difficult to get in calf by reason of too many good things giving over-much fat."

The meadow fescue, *Festuca Pratensis*, of which the professor speaks so highly, is a valuable grass for permanent pasture, predominating in all the best English meadows. In the Vale of Aylesbury, the richest grazing ground in the world I may say, it constitutes a considerable portion of the most valuable and fattening pastures of that wonderful district. It makes excellent hay, and, although a large plant, the leaves are succulent and tender. It does not grow tufty, as is the case with most of the larger grasses, and does not arrive at its full productive powers so soon as either the cocksfoot or the foxtail. No species among the English native grasses produces so great a quantity of early food as

clover, but never showed itself again after the first cutting. Not one blade of it was to be seen when the second and third crop of clover was mown. It is, in fact, an annual, but, by being sown with a grain crop, it, like the red-clover, becomes converted into a biennial. The difference between the weights of the two will surprise any one unacquainted with them: the annual weighs 30 lbs. a bushel; the perennial, 18 lbs. a bushel.

I am surprised to see that Mr. Brown does not include the cow-grass, *trifolium pratense perenne*, among the clovers he recommends. The true cow-grass—not the *trifolium medium*, a worthless weed, which is a troublesome creeping plant, and never fails to destroy the more valuable pasture plants around it—the true cow-grass, is a great favourite with the best English farmers, and is more lasting than the broad red-clover. When clover is intended to stand more than one year, the cow-grass should always be sown.

As for including lucerne in the permanent pasture mixture, I can say nothing about it; except that a plant that is