

THE HERBAGE OF PASTURES.

Surely Mr. Fream's second paper on this subject is worthy of something more than the very brief notice accorded by reviewers of the Midsummer number of the "Royal" Journal. At any rate, that was my impression after looking through my own copy, and I doubt not that most farmers will agree with me in my high estimation of such a record. Though far from exhaustive, its scope practically covers the whole of the British Isles, and its facts, to say the least, are most interesting—may I not go farther and add instructive?

Take, for example, that turf sent by Mr. Charles H. Eady, Home Farm, Ardington, near Wantage, Berkshire, from the estate of Lord Wantage in the Vale of White Horse, of which Mr. Eady says:—"I have forwarded a block of turf cut from a field bearing the best character of any in this immediate neighbourhood; it is 46 acres in size. The last week in April I stocked it with forty-four Hereford steers and four Shire fillies; the Herefords were all fat, and sold to a London dealer by the middle of July. I then drafted thirty-six other Herefords into it from inferior pasture; they were all fat and gone by the end of August. I then, stocked it with forty Short-horn heifers; twenty of these were sold fat at the end of October, the remaining twenty, being half fat, were put in the stalls about the first week in November. I then put in twenty four Welsh runts (stores), to clean it up, and they have (February, 14th) until quite recently been doing well, when I moved them into strawyards." He adds the significant fact, "I have never known any artificial food of any kind given to beasts in the field."

Dr. Fream's analysis of the herbage of this singularly nutritious pasture shows that fully a third of it consists of white clover, and almost three fourths of the grasses consist of perennial rye-grass. The soil has nothing of the character of a rich alluvial deposit, but is described as eight inches of strong loam resting on a very sticky, greyish clay.

Of course, the condition of the beasts when turned into the pasture had its influence upon results, but the bulk of herbage there must have been to carry such a head of stock, and its highly nourishing properly was assured by the predominance of the clover and rye-grass.

It would probably be thought rank heresy to recommend as permanent pasture for any soil a mixture consisting chiefly of perennial rye-grass and white clover, with just a dash, of foin, crested dogtail, and timothy, yet that is practically the composition of Mr. Eady's pasture, and in the first part of the Royal Journal for 1882, containing Mr. Faunce de Laune's famous paper on the selection of grasses for permanent pasture, Mr. C. Randell, in a short, pithy paper on the same subject, actually recommended for clay land a mixture consisting of cocksfoot, perennial rye-grass, cowgrass, and Dutch clover. His aim evidently was bulk of herbage and nourishing quality. A full early growth is a certainty when rye grass is plentiful in pasture; and according to Mr. Eady's statement, it also affords, an equally abundant late supply of feed.

I have often heard it said that said that the pasture on Pevensy Level, in Sussex, will *graze* a beast and a half to the acre, and have seen many a beast brought from there in prime condition in October. A high privilege is it thought to obtain a few acres of that "marsh" land by cultivators of the poor, thin soil on the Hastings sand formation, but its fame is more local than general, and that is probably why a specimen of it was not obtained by Dr. Fream. In 1888 turf taken from five fields in Romney Marsh, was under trial, and the herbage was found to consist almost exclusively of three-fourths of

(1) i. e. fatten.

perennial rye-grass and one-fourth white clover. The soil of both marshes is a rich alluvial deposit.

It is a singular and notable fact how largely white clover (*trifolium repens*) enters into the competition of the best old pasture, one of the most remarkable instances being that of the rich herbage of Beeby Manor, Leicestershire, which contains upwards of 40 per cent. of it. A fair proportion of muriate of potash in a manure dressing always ensures a free growth of this clover, and as coming well within the scope of every farmer, I may mention the excellent effect upon it of a liberal dressing of wood ashes saturated with sewage.

How would the new pastures laid down during the last decade bear the test of a similar experiment by Dr. Fream? If particulars of seed, cultivation, age, and present condition could be had, the result could not be otherwise than instructive.

EAST ANGLIAN.

The Agricultural College Fund.

Editor Vt. Watchman:—As Governor Page well says to the legislature, "It is a matter which should receive your immediate and careful attention, to the end that ample discussion may be had before the hurry of the closing days of the session shall divert your attention to matters of infinitely less importance." Now, what have we, the agriculturists and mechanics of Vermont, to say to our representatives and senators—we, the productive workers of the state, the toiling farmer and mechanic; we who are heavily taxed, hard-worked and poorly paid? Why, simply this, that we want the full benefit of this munificent gift that the United States congress intended we should have. After the experience we have had with a union college(1) for the last twenty-five years, and seeing the same experience in many other states, it is probable that no sane and sensible man in Vermont can honestly say but that he thinks a separate agricultural and mechanical college, equally well equipped and equally well managed, would do infinitely more good than the present arrangement.

J. C. CHAPIN.

AGRICULTURE.

Paris, 25 October 1890.

Dairy industry and meat production are extending so rapidly, that farmers are hardly able to keep up with the requirements of the new departure. As the consequence of this advance, the increased production of soiling and of roots, becomes a corresponding necessity. M. Lecouteux draws attention to oats as a soiling crop. It is a plant that, whether in the green or the harvested state, is invaluable, because rich in nitrogenous matters, and easily digestible. Per acre, it is perhaps among cultivated crops the one which yields the largest amount of meat forming substances. Oats occupy so important a roll in rotations, that the crop enables the farmer to economize in the matter of meadow land. Oaten soiling has a few superiorities worthy of being weighed; the seed costs less than tares, peas or maize; and it is green in July, when the hot and dry season tells on the supply of cut forage. Some cultivators of dry lands, sow crimson clover—red clover if the climate be hard—along with the oats, and cut down the latter when the grain has so commenced to form, as to be in "the milky way," when pressed between finger and thumb. The oats can thus be cut with a good bottom of young clover.

There are three difficult food periods in the year for

(1) That is, classical and agricultural combined.