## CULTIVATION OF THE GRASSES.

## BY L. DURAND

Foremost among valuable farm crops, is grass: the staple as it were, when compared with other vegetation. To the farmer it is of inestimable importance to secure his lands to grass, at least a goodly proportion of his domain. In fact, the foundation of all successful tillage lies in this point, namely: "Does your farm produce-all the valuable, natural and exotic grasses well; if the response be affirmative, you may muster with tillers who have the right to be considered good cultivators or at least you may indulge in the gratifying unction that your neighbors envy you the possession of a superior farm.

Mext to the farmer, who is befriended by green meadows, and uplands waving with minature seas of Timothy," is the rural gentleman who delights in a velvety lawn spread around his house in all its refreshing greenness and glistening brilliancy. To attain this, is not in all cases an easy matter. The difficulty experienced by the amateur, is an inadequate knowledge of the different varieties of grass and their adaptibility to different soils. I shall therefore give the names and description of those kinds, with which I am practically acquainted.

Timothy or Merd's grass, (Phleum Pratense) is one of the most valuable of all the cultivated kinds; it is of foreign origin, but adapts itself to American soil like one to the "manor born." In England, twenty-nine tons of this grass have been cut from six acres of ground, such astonishing yields are doubtless owing to high cultivation and a propitious climate. In this country, it is made use of to an almost unlimited extent for market hay, as it possosses a large per cent. of nutriment, when dry .-This fact, however, does not prove it the best; for not unfrequently it is spoiled in making in hay, while in the field; it being very sensitive of any extraneous influence. When this grass is put in the ground alone, it often grows coarse, with large stalks particularly the season subsequent to seeding. This rankness of growth, of course, tends to depreciate the quality of the grass for fodder. In order to avoid this error (for it is an error,) the seed should be put in very thick, with a generous proportion of redtop, (Agrostis vulgaris.) The result will be a fine, tender grass, plethoric with nourishing juice, and affording excellent pasturage and a velvety lawn.

When timothy is sown alone (a plan which I would not recommend) on grounds which have been previously well stimulated by the application of manure, the quantity of seed demanded will be about one bushel and a half per acre. In case the soil is early in indifferent condition, two bushels per acre

will be none too much. A better market hay, however, can be produced by sowing one bushel of redtop, to half a bushel, or three pecks of timothy per acre. Oftentimes, one bushel of seed will be as effeetual in seeding an acre of and, as two bushels on other occasions. Notwithstanding this singularity, thick seeding is at all times advisable, whether for pasture; or lawn purposes as in unpropitious years, much seed never vegetates. Clover is also, essential to good pasture. In case land has been previously planted to such crops as require much animal manure, it will not be necessary to put in any clover seed, as a sufficient quantity will be found growing spontaneously in connection with the timothy, the first season. The second season, timothy and redtop, will displace the clover. Timothy grass, as a general rule, grows but once in a season, although in low swales if the weather be favorable; it will after being cut, afford good early full feed for cattle.

Red-top, in some sections of the country, is considered the very best grass for feed. Entirely alone it makes excellent today for stock; horses, however, prefer a mixture of timothy.

Red-top forms a close, tight sward for the lawn, and effectually shuts out weeds of almost every description. It will also grow and flourish well, on a much lighter soil than timothy, remaining in the meadow and growing a good crop of grass, long after the timothy has become a reminiscence. There appears to be two kinds of red-tops, one sort that is peculiar to the west of the upland pastures of New England, and grows about twelve inches high, with a small slender stalk, and a short fuzzy top. The other kind, the red-top proper, grows from fifteen inches to two feet with a long slender head as a top and a stalk in proportion. The small red-top, may be as nutritious as the larger kind, it certainly makes a good grass for cattle when fed down, and not permitted to run into flower and seed before the animals are "turned in."

Red Clover, we think is entitled to be called a grass, although some claim that it is not a grass proper, then call it a grass improper. A late writer in the American Agriculturist, called Indian corn one of the grasses. If this be the case, I think there need be no question but that clover may be recognized by a similar distinction.

Red clover for pasture, is the most economical use to which it can be devoted. It is also valuable as a soiler turned under when green. The amount of feed that red clover will yield in a season, is almost incredible. After it has thoroughly "headed out," "turn in" stock enough to feed it down in the shortest time, in which case it will continue to grow fresh feed during the remainder of the season. It is a bienial.