

of fertilizing properties, that would otherwise impart to the wheat plants a too luxuriant growth, causing the crop, in many instances, to be blighted with rust and other diseases. Here are two opposite influences produced from sowing clover with wheat, and it is for the farmer to determine the practice best adapted for the particular soil he cultivates.

Without clover it is vain to carry out the business of farming, for a lengthened period, upon a profitable scale; and, therefore, whether the land be seeded down with the winter or spring crops, or both, one of the main points to be observed is, to be certain to have, at least, one-fourth of the farm occupied with that crop, and to seed down only such fields as are in a high state of cultivation. The best crops to seed down with the cultivated grasses, are barley and spring wheat; spring wheat ranks next to barley, and rye, probably, next to spring wheat. Of all the crops that are cultivated, which are at all adapted for the seeding down of grass seeds, oats are the least suited for that purpose; still it is a common practice to sow grass seed with the crop.

A liberal amount of seed should be sown, and a less quantity than eight pounds of clover seed, and six pounds of timothy seed, per acre, will not secure a full crop of both. One half of the meadow and pasture lands of the country are only in a partially productive state, from the small quantity of seeds that are sown. It is a bad practice to depend upon the natural grasses filling up the blank places caused by sowing too little seed. It is also a practice that all careful husbandmen should avoid, in allowing cattle, horses, and other stock to roam at pleasure over the grass fields in the spring and autumn months. A loss of twenty per cent to the hay crop is generally sustained by this practice; and it would be a much more commendable course to keep every description of stock off the grass lands when they are easily ponched by the treading of horned cattle and other stock, and during which period they might be fed with such provender as could be saved through this and other careful means, that might be uniformly observed, without difficulty, on a well-regulated farm. This is a matter of too much importance to be neglected; and

when no care is taken to preserve meadow lands, especially young clover, from the depredations of stock, during the months of April and November, it should not be a matter of wonder that the hay crop the following seasons is below an average, or scarcely pays for the trouble of harvesting and curing. With a little care, in the management of grass lands, two tons per acre may be safely reckoned upon, and a much less yield of hay would not satisfy a provident and skillful farmer.

The business of growing timothy seed, as an article of export to the United States, is a matter of increasing importance. It is worth, in New York, two dollars per bushel, but our farmers rarely get more than half that sum for it. Fifteen bushels per acre is a fair average yield, and as high as twenty bushels per acre of timothy seed has been produced in the Niagara District, where great quantities of it are grown expressly for the markets of the United States. Timothy, when sown alone, is rather a severe crop on land, but when accompanied, in nearly equal proportions, with clover, it improves rather than injures it.

ON FARM MANAGEMENT.

Prize Essay—By J. J. Thomas.

The great importance of performing in the best manner, the different operations of agriculture, is obvious to every intelligent mind, for on this depends the success of farming. But a good performance of single operations merely, does not constitute the best farmer. The perfection of the art, consists not only in doing everything well, individually, but in a proper adjustment and systematic arrangement of all the parts, so that they shall be done, not only in the best manner and at the right time, but with the most effective and economical expenditure of labor and money. Every thing must move on with clock-work regularity, without interference, even at the most busy seasons of the year.

As this subject includes the whole routine of farming, in a collected view, as well as in its separate details, a treatise upon it might be made to fill volumes; but this being necessarily confined to a few pages, a general outline, with some remarks on its more essential parts, can only be given.

CAPITAL.

The first requisite in all undertakings of magnitude, is to "count the cost." The man who