

some idea of the appearance presented by a well-laid-out, and neatly-kept farm.

We ask our readers to study these tasteful plans,—to make the contrast between the appearance of carelessly-kept farms, and places such as are here represented—and say if the entire country might not be transformed into one scene of natural and artificial beauty, if every man who owns an estate would put and keep his place in good order

Orchard Grass.

(DACTYLIS GLOMERATA.)

Judging from the fact that the above is seldom asked for at our seed stores, compared with clover and timothy, it would appear that its true value is not understood, or else not appreciated. We consider it a very valuable grass for certain uses, and in particular localities, and are almost prepared to say that no farm, where pasturage is part of the rotation, should be without some of it.

The mistake made about orchard grass is that it is allowed to become too old before cutting for hay, or having stock to graze on it in the spring. No grass grows so rapidly or continues growing so long throughout the season, or allows to be pastured so early. It requires, when intended for hay, to be cut young. Blossoming about the same time as clover it is ready for cutting with it, which timothy very often is not. The bad repute of orchard grass hay is because it is allowed to get old before cutting, when its stiff, fibrous stem is almost as unsuitable for food as timothy which has gone to seed. It's only value then is to use it as straw for litter.

Many of our best farmers who feed all their hay, and do not depend on selling it, value a mixture of orchard grass and red clover before any other grasses. It makes a highly nutritious hay and much relished by stock of all kinds. Clover hay (so called), that is hay where clover predominates, so far as we know, is seldom cut, for the reason that it grows too rank and coarse. This is owing either to its chiefly occupying the ground as in the year succeeding wheat, or else in the second season growing so much more rapidly than the timothy, it outgrows the latter, allowing but very little to mix with the clover.

Red clover is a biennial plant, and every farmer experiences that it is only after the second year from wheat that the timothy has much chance to develop, and then makes the article so saleable in market under the name of timothy hay. Orchard grass, when sown with clover, obviates this difficulty, grows as rapidly as clover, starts in the spring as early, and by this similarity of habit makes a suitable grass to mix with it.

For pasturage we greatly value orchard grass, for three reasons: It stands a drouth better than any other, will bear heavier stocking, and comes forward in the spring very early.

We have often been surprised to observe how quickly orchard grass recovers and grows after being closely cropped; a week or ten days of summer growth will make quite good pasturage. Orchard grass also, by its great amount of fibrous root, tends to improve instead of impoverishing the soil, and we have observed an orchard grass sod generally turns up a good dark color on being ploughed. It is not at all fit for a lawn, as it sometimes grows in bunches or tussocks, especially when sown thin. The proper quantity when sown alone is two bushels per acre, when sown with clover one bushel is sufficient. It grows better than most grasses under shade. Orchard grass weighs about twelve pounds to the bushel.—*Rural Advertiser.*

BET-ROOT SUGAR, &c.—From a recent discussion by the Farmer's Club of New-York, on the subject of beet root sugar, we extract the following remarks:

Mr. WILLIAMS contended that it never would be profitable; that beets may be profitably grown for stock, particularly milch cows, but never for sugar-making. When grown upon some soils, they possess such a small amount of saccharum as to render them unfit for the purpose of sugar-making. He thought farmers should all confine themselves to the production of some sweeter substance, or else give up the attempt to make their own sugar. Dr. TRIMBLE thought it was no use to war against climate. This portion of the earth was not adapted to sugar making. All northern farmers will fail who attempt to make sugar. They cannot compete with tropical climates. They are all prosperous now with ordinary crops. Let them sell them and buy sugar and coffee, and pay the war tax on them, and not try to shirk that and be always looking for a substitute.

Notes, Queries, and Observations.

BY A THINKING MAN.

4.—MANURES.

The importance of manure to every farmer and gardener is too well understood and appreciated by thinking men to need special remark. Nothing too emphatic can be said on the importance of saving and procuring the largest possible supplies. This is absolutely essential to good cultivation. I am just now thinking of the best methods of using not only the farm-yard manures, but the more concentrated fertilizers of every kind. The principle of the thing is to have the fertilizer thoroughly incorporated with the soil, so as to form a homogeneous mass. I think all experience goes to show that it is, for many reasons, extremely desirable that ordinary manure should not be mixed with the soil until it is thoroughly rotted. This can seldom or never be so the first season. One paramount reason is that the multitude of weed seed in nearly all hay and straw, should not be, as it were, sown anew, until thoroughly rotted and rendered innocuous. Moreover, manure, in our very dry climate, is almost useless for the first season if only put on in the spring. As a general rule, this should be done in the preceding fall, when it becomes thoroughly incorporated by the frosts and rains of winter and spring. Indeed even guano, one of the most powerful fertilizers, is of little use the first year if only put on in the spring. Its value is much increased by being spread over the soil the preceding fall. And I rather think this argument, to a greater or less extent, will hold good with regard to all manures and fertilizers whatsoever. It is very certain that the only way to render fertilizers immediately beneficial is to use them diluted in water, and on a large scale. This is often difficult, if not impracticable. It is affirmed of Coe's Phosphate that its immediate beneficial application to a variety of growing crops may be depended upon. I cannot speak from experience, except as to a patch of turnips which I put in with a good dressing of Coe's fertilizer, and certainly the results were remarkable. But still I am not sure that I applied the manure according to the best methods, and should be glad, and no doubt there are others in the same way, for any specific information on this head, that is as to putting in with the crops in spring or early summer. I doubt not there are many parties who have practical experience, and can very readily give this information. I know it would not be without use. I think it would be a good plan for manufacturers of fertilizers, to indicate the best way of using and the quantity per acre or rod, for the variety of crops for which it is most adapted.

5.—SIZE OF FARMS.

I have frequently thought that in this country farmers often err in attempting to cultivate a greater breadth of land than they have capital sufficient to work profitably. In England and Scotland, it is regarded as an axiom that a tenant-farmer should have a capital of not less than £10 per acre, to stock and work a farm thoroughly and profitably. At the present time, this is just about the cash value of a first-rate cleared farm with fair buildings near the best markets in this country. In the great majority of cases, the properties are, at least, encumbered to one-half or two-thirds this value, for which the owners have to pay 8, 10, and sometimes even 12 per cent. interest! Then, with scarcely any available capital to work his farm, pressed on every side by debt and difficulty, how is it possible a man can get on in this way? He owns 100 acres or more. What of it? Would it not be infinitely better to sell all but 20 acres, or even 10? With this he would be a far happier man, and a richer one, at the end of seven years. It must come to this at last. Fifty, twenty, or even ten acres thoroughly cultivated, according to the most approved methods of modern husbandry, would be much more profitable than one hundred acres slovenly worked, and almost wholly unmanured. Infinitely better sell one-half, two-thirds, or three-fourths, and farm thoroughly the remainder. Nor are small farms without notable precedent. In Belgium, farms range from four up to ten acres! The whole country is cultivated like a garden, and nowhere is to be found a happier, or a more prosperous people. Large fortunes can never be realized, but there is certainly little or no pecuniary embarrassment or poverty; and such a thing as selling a man's homestead by process of law, is scarcely ever heard of. I have often thought a man had almost better cut off his right hand, than let himself run within the coils of the money lenders, who, as a class, are heartless and unfeeling as the nether millstone. I do not specially recommend small farms,—but simply that no farmer should undertake to cultivate more land than he has the means to do thoroughly.

My Wheat Crop.

In the spring of 1864, there fell into my hands a copy of Flint's Report of the Agriculture of Massachusetts for the year 1863, and finding, from a perusal of the volume, that some of our Essex farmers had met with fair success in the raising of wheat, I determined to ascertain whether or not the crop in question could be grown on my land. In accordance with the decision I immediately sent to Boston and bought one and a half bushels of spring wheat, for which I paid three and a half dollars, and having soaked it just one hour in some old pickle which the women-folks were about throwing away, I partially dried it by the kitchen fire, and took it into the field. This was on the last day of April.

I planted the seeds in drills on a lot which contained one and a quarter acres, and from which I had gathered, in the autumn of 1862, a little more than one hundred and sixty bushels of excellent potatoes. For a period of thirteen years immediately preceding the year last mentioned, this field had been used as a cow-pasture. It had a southerly, or, to speak more correctly, a south-westerly exposure, and was situated at the base of a sparsely wooded ridge, while on its northern border there was a belt of oak and hickory trees. I ploughed the land to the depth of six inches, and pulverized it with a harrow,—having previously applied to it two and a half cords of composition made of one part of wood ashes, two parts of muck or swamp-mud, and three parts of rotted sea-kelp. Three days after the springing of the plants, I gave the field a dressing of coal ashes,—which had the effect to banish the flies that began to feast upon the rows. In the course of the spring I ran the cultivator between the drills not less than five times,—thereby keeping the lot almost perfectly free from weeds. On the 27th of August,—the seed being at that time "in the dough,"—I had the wheat cradled and stacked, and on the 7th of the next month it was carted to the barn. Ten days later it was thrashed, and a prime article it proved to be.

My account of the crop stood as follows:

PRODUCT	
50 bushels, at \$2.50	\$125.00
2 1/2 tons of straw, \$8.25	20.62 1/2
	\$145.62 1/2
Expense, (not including labour),.....	22.50
	\$123.12 1/2

—ESSEXER, in *New England Farmer.*

Sorghum for Fodder.

I HAVE seen several articles lately in your paper on the culture of corn for fodder, and I have been surprised that no one has tried sorghum for the same purpose. In the Patent Office Report for 1861, there is an account from the South of France, which states that forty-eight and a half tons (green, of course,) have been raised on one acre of ground. How much it will lose in drying, I have no idea; but this much I do know, that sown broadcast at the rate of two bushels to the acre, it will yield more feed than anything I have ever tried in the way of grass. I have tried it for two years and have found the yield truly surprising—I should think more than two tons of dry feed, but never having weighed it, I cannot speak positively, but am perfectly satisfied that it is far superior to anything I have ever tried, not even excepting Hungarian grass, so much lauded some years ago.

Sow it in good corn ground, as early as it can be put in good order; harrow smooth, the finer the better; and when the seed is sown, go over it with a bush; it must not be covered deeply, and if the seed is good, it needs no soaking. Let those who think so favourably of corn fodder try the sorghum, and I do not think they will bother with corn.

My horses and cows prefer it to any kind of feed I can give them; I have tried them repeatedly, and they will leave the best timothy for the sorghum and eat it up clean. The blades we pull from the cane we grow for syrup, are preferred by the stock to corn blades, and they will devour it with the greatest avidity. By sowing early, it can be cut with a strong cradle at the best time for curing properly. After being cut a few days, I have tied it up in bundles and cocked the same as wheat or oats. The quantity of seed sown to the acre prevents the stalks growing thick, which renders it easy to cure.—*Letter from Ohio in Country Gent.*

DIGGING MUCK.—Messrs. Editors: Are your readers aware that for those who do little but farming, and have a suitable chance, winter is the best time to procure muck? With the swamp frozen and covered with snow, and the weather cold, the prospect may look rather discouraging, but take the scraper and team, remove the snow, cut the frozen surface