

COMPARATIVE VALUE OF HAY, VEGETABLES,
AND CORN.

I wish briefly to draw the attention of farmers to the value of hay, compared with other crops, for the feeding of stock. An acre of hay yields one ton and a half of vegetable food. An acre of carrots or Swedish turnips, will yield from ten to twenty tons; say fifteen tons, which is by no means an exaggerated estimate. It has been ascertained by experiment, that three working horses, fifteen and a half hands high, consumed at the rate of two hundred and twenty four pounds of hay per week, or five tons one thousand and forty-eight pounds of hay per year, besides twelve gallons of oats each per week, or seventy-eight bushels by the year. An unworked horse consumed at the rate of four and one-quarter tons of hay in the year. The produce, therefore, of nearly six acres of land is necessary to support a working horse by the year; but half an acre of carrots, at six hundred bushels to the acre, with the addition of chopped straw, while the season for their use lasts, will do it as well if not better. These things do not admit of doubt. They have been subjects of exact trial.

It is believed that the value of a bushel of Indian corn in straw and meal will keep a healthy horse in good condition for work a week. An acre of Indian corn which yields sixty bushels, will be ample for the support of a horse through the year. Let the farmer, then, consider whether it be better to maintain his horse upon the produce of half an acre of carrots, which can be cultivated at an expense not greatly exceeding the expense of half an acre of potatoes, or upon half an acre of ruta baga, which can be raised at less expense than potatoes, or upon the grain produced of an acre of Indian corn, or on the other hand, upon the produce of six acres of his best land in hay and grain; for six acres will hardly do more than to yield nearly six tons of hay and seventy-eight bushels of oats. The same economy might be as successfully introduced into the feeding of our neat cattle and sheep.

These facts deserve the particular attention of the farmers who are desirous of improving their pecuniary condition. It is obvious how much would be gained by the cultivation which is here suggested; how much more stock would be raised; how much the dairy produce might be increased; and how much the means of enriching the land, and improving the cultivation, would be constantly extending and accumulating. But when we find on a farm of two hundred acres, that the farmer cultivates only two acres of potatoes, one acre of ruta baga, and perhaps a quarter of an acre of carrots, we call this "getting along," in the common phrase; but we can hardly dignify it with the name of farming. I am aware that labor of a proper kind is in many cases difficult to be procured, and with our habits, as difficult to be managed. Farming, likewise, can in few situations be successfully managed, unless the farmer has capital to employ, equal at least to one year's manure and one year's crops. A large portion of our farmers, also, from the nature of their habits and style of living, are so prosperous and independent, that they have no occasion to extend their cultivation beyond what it now is, in order to meet their wants; and to incur all the trouble, vexation, and risk of employing more labor, expending more capital, and increasing their cares.

But it is not fair to produce such instances as any examples of the profit or unprofitableness of husbandry: when carried on, as all other branches of business, to be successful, it must be carried on with intelligence, skill, industry, enterprise; and all the capital and all the labor which can be advantageously employed in it. I will not, however, anticipate such general views of

the subject, as I propose to take in the retrospect of the whole survey.—*Colman's Survey*

DOMESTIC ECONOMY.

In looking over my returns, I was struck with the remark of a man of much practical wisdom, and one of the best farmers in the commonwealth. He says "that a farmer should produce upon his farm all those supplies for his family which the farm can be made to yield." In his case this is done within doors and without, for there the spinning-wheel has not forgotten to turn round, nor the shuttle to speed its flight. In this cottage, whose neat and beautiful arrangements cannot be surpassed, the clothing, the bedding and the carpeting were all the product of their own fields and flocks. I shall not soon forget the unpretending and hearty hospitality of these enviable dwellings. I have slept many a time under a silken canopy, and trodden many a carpet as soft as the pride of eastern luxury could make it; but never with anything like the sentiment of honest pride and independence which I saw here. The floors spread with carpets made from their own flocks, which for fairness or beauty the foot of a prince's need not disdain, and on a cold night slept in woolen sheets from their own looms as soft as the shawls of Cashmere; and wiped my face with towels spun with their own hands from their own flax, of a whiteness as transparent and delicate as the drifted snow. In such beautiful examples of domestic management it is delightful to see with how limited means the best luxuries and comforts of life may be purchased. Nor were these instances few. The county of Berkshire abounds with examples of this domestic comfort and independence. Much to be regretted will be change, which has already invaded many parts of the state, when, under the pretence of superior cheapness, these household fabrics shall give place to the more showy but flimsy products of foreign industry, and the healthy exercise of domestic labor and household cares shall be deemed degrading in our wives and daughters, and exchanged for the idleness and frivolities of pride and luxury.

I agree entirely in the sentiment above expressed, that every farmer should, as far as possible, supply the wants of his family from his own farm. He should supply himself with bread, meat, vegetables, milk, butter, cheese and clothing, so far as his farm can be made to do it. He can almost always do it at a less expense than he can purchase these supplies. The labor requisite for this purpose may often be given at times when it would not otherwise be occupied; and by hands for which there might otherwise be no employment. The sentiment of self-respect and self-dependence inspired by such a course is a great gain. The satisfaction of eating bread raised by one's own labor is not small; and various and important moral influences, which I shall not now discuss, render it altogether desirable, though in some cases the same amount of labor consumed in their production, if applied in other ways, would purchase a larger amount of the same supplies. Though the supply of our own great wants from our own farms might seem, however, in some cases to be a pecuniary loss, it is always in the end a moral gain, with which the pecuniary loss is not to be put in competition.—*Colman's Survey*.

DRAINING.

MESSES GAYLORD & TUCKER—I submit to your consideration, some of my views upon a subject which has been extensively examined in England and on the continent of Europe. These views, however, have been adopted with reference to a state of things with them; such as the price of land, labor, redundancy of capital, and many other considerations, differing so essentially from ours, that their adoption to their full extent in this country may be considered of doubtful utility.

I have desired to see this subject thoroughly investigated, with particular reference to our own condition; but if it has been done, it has not fallen under my observation. With these views, therefore, if my suggestions shall be found to vary somewhat from standard English authority, I beg that it may be considered as emanating from a desire rather to suggest inquiries for those better able than myself to examine the subject in this light, than from any spirit of controversy with systems which are probably well adapted to the state of things in Europe.

Two questions are necessarily involved in the subject: first, its utility; secondly, the mode of effecting it. To do justice to either, it will be necessary to understand the different conditions in which water is found, and the manner in which it affects the soil. So far as my observation has extended, it may, with sufficient accuracy, be classed under the four following heads:

First—What is usually termed 'surface water.' Under this head I include both standing water and running streams, when their source is beyond the premises affected, as the mode of removing either is nearly the same, although they may and generally do affect vegetation in many respects.

Secondly—Subterraneous ponds. These differ but little from those above the surface, except that they are filled with porous earth or a sufficient quantity of it to allow of a circulation of the water to every part of the basin. These subterraneous collections of water are evidently held in their position by the same means as surface ones; an impervious understrata; and like them rise and fall with the wet and dry seasons.

Thirdly—Springs. This term has been commonly used to indicate the point where a subterraneous stream breaks out upon the surface; but I use it in a more extended sense, as including all well defined subterraneous streams. There are some respects in which these differ from surface ones, having a serious bearing on the vegetable kingdom. They have their immediate source at a considerable depth in the earth, from whence the water arises, uninfluenced by the air, the sun, or any of the causes which fertilize the surface.

Fourthly—For the want of any more definite term to indicate the remaining condition in which water appears to the farmer, I shall call it a *leach*. Water is frequently found sluggishly leaching out upon sloping lands without any defined channel. These leaches are frequently of great extent and depth. This is the worst condition in which water is found, whether we consider the extent of its injury, or the draft which it makes upon the intelligence and patience of the ditcher. Like springs, they have their immediate source below the influence of the air or surface heat.

This classification will enable us to look more accurately at some of the operations of water upon soil; how it affects its vegetating powers; what influence it exercises upon the atmosphere, and through that upon vegetable life; and what direct influence it exercises upon vegetation, and thus enable us to decide upon the utility of draining.

I am aware that I cannot go into an extended analysis of these propositions, without intruding upon the rights of others, equally entitled to your hearing. I will confine myself, therefore, to a single case, and that by way of illustration, of frequent occurrence among good farmers: a piece of land, which is too wet for early ploughing, but from the surface of which the water will retire so that the crop may be sown in "pretty good season," to use a common expression. Now, suppose this field to be affected by a leach, as is frequently the case with such lands. It will be seen that this soil, up to the time of putting in the crop, or about that time, has received little or no benefit from the influence of spring. The water coming from a source below its influence, and mixing freely with the soil, retains it at its own temperature; and at a point below that