



AGRICULTURAL.

THE GRAIN MARKET.

The advices from England give hopes of an improved state for the grain crops, in consequence of the change in the weather. The great amount of the cereals which we have been able to ship from our surplus products to Great Britain and Ireland, has had the effect of keeping their market there well supplied, and alleviated the distress which at one time so seriously threatened the people of England and Ireland, the former from the shortness of their wheat crop, and the latter from the deficiency in that of their potatoes from disease.

The demand still continues undiminished for all the grain we can get into their markets, for the last estimates we have seen from a reliable source, places the figures at upwards of 50,000,000 bushels as the quantity required before a new crop comes in, and the bulk of this amount is looked for from the United States, as the supply from the usual European sources is now admitted to be far below former calculations. We have still a large amount of grain on hand, and although the quantity at the principal shipping points is decidedly less than at this time last year, the prices now ranging will bring it into market, notwithstanding the heavy freights, to which is attributed the cause operating to prevent farmers and small dealers at the West from sending their stocks to the seaboard. Wheat about this time is quoted on our Exchange at \$2, rye, \$1 and corn 65 cts. per bushel. The present appearance of the wheat fields does not indicate a very heavy crop this year—and the backwardness of the season (being at least twelve days later than usual) gives no certainty of an extraordinary corn crop like that which we had last year.

The frost, too, which was experienced at the South in April, not only affected the cotton and the fruit, but also the tender corn which had been planted—and in many cases where the corn was gotten in, the cold weather has prevented its germination, and re-planting to a very great extent has been the consequence.—*American Farmer.*

HINTS ABOUT WORK.

We have said there is no lack of profitable work for any man capable of doing it. But there are different degrees of capacity. We have to compete with each other, and the man that can accomplish a given amount of work at the least cost makes the most money.

Farmers must study economy.—We do not mean by this that they must live cheaply.—Farmers are not often extravagant in their style of dress and manner of living. It is the best of economy to dress warm, and comfortably, and appropriately to do the work. It is good economy to make the house as pleasant as possible. It is good economy to eat well, sleep well, and work hard.

Working hard is not always working to the best advantage. A man may work very hard chopping wood with a dull axe, or pumping water with a pump that "sucks air," but he is not working with economy.—A man gets pay, or ought to get it, not for "working," but for what he accomplishes. This is as true of the farmer as of his hired man, though we do not feel its force so fully in the one case as in the other. We do not like to pay a man for carrying one pail of water when he might just as well carry two, or for plowing or harrowing with one horse when he might just as well drive three. But farmers themselves often do things equally wasteful of time and labor. Do we never take a load to the city and come back empty, and then go empty to the city to bring back a load, and thus lose half our own time and that of the team, and pay double toll into the bargain?

Turning animals to a straw stack and letting them help themselves seems an economical way of wintering stock, but it is fearfully extravagant. We do not mean merely that they waste the straw, but it is compelling them to eat their own bodies—it is feeding them on beef, mutton, butter and fat! Can you afford to do so?

True scientific farming consists largely of the exercise of common sense. No amount of mere knowledge will enable us to dispense with system, order, judicious planning, and economical work.

Live Stock.—Much of the success of a farmer depends on the proper and economical management of his live-stock. We should never forget that it is live-stock. We can paint an implement and stow it away until it is required, but our animals must have food to eat every day. They must have food enough to keep them warm and sustain the vital functions. If you do not give them food enough they must live on their own fat and flesh.

Horses.—With us, timothy hay sells for as much per ton as we can buy corn meal for. In such circumstances, where a farmer has plenty of good bright oat or wheat straw, it is poor economy to feed timothy hay to farm horses. Cut up the straw into chaff. A bushel of it will weigh about eight pounds. If the horses are not working mix two quarts of corn-meal with a bushel of the chaff, and let them have all they will eat. If they leave any, remove it from the mangers and give it to the cows. If the horses are at moderate work, two or three days a week, mix three quarts of meal with the bushel of chaff, or four quarts if the horses are at moderate work nearly every day. If you have conveniences, it is a great advantage to wet the chaff with boiling water; cover it with a blanket and let it stand for a few hours. Try this plan.—*Am. Agriculturist.*

PETROLEUM FOR MAY BEETLES.

Mr. C. R. Dodge, the statistician of the Department of Agriculture, gives the following in relation to the white grub so common in meadow lands:—

"This destructive insect, producing in this country the May beetle, and in Europe the beetle known by the common name of 'Cockchafer,' is well known to many of our readers through the damage it does to pastures and grass lands. Their mode of warfare is to devour the roots of the grass, causing the sod to die out in spots, and it is said that simply applying to the affected places water in which petroleum has been stirred, will exterminate them. It is also recommended to keep down insects on plants. The small quantity of petroleum seems to impart its disagreeable properties to a large amount of water, and applied in this manner the plants are uninjured."

The May beetle of the United States and the Cockchafer of England, are one and the same thing. The larvae require three years from the egg to attain the moth state, during which time it feeds on various vegetable substances, and is particularly destructive to meadows. We have seen meadows so seriously injured that the sod might be rolled up like a carpet. We have not so much faith, however, in the saturation of water with the effluvia of petroleum, for killing this pest, unless applied in such quantities as would be detrimental to vegetation, and much less should we advise its application to the foliage of living plants. The fact that the larvae sometimes disappear suddenly after these isolated applications, may fairly be attributed to the fact that they may be at this time just ready to undergo their transformation.—*Western Rural.*

[Will some of our readers try the above remedy and report to us?—Ed. F. A.]

KEEP YOUR IMPLEMENTS BRIGHT.

When you have done with your plows and other implements having bright surfaces, always clean them thoroughly. Wipe them dry, and before putting them away rub them lightly with lamp black and fatty oil, or even lamp black and kerosene. It will preserve the bright surface intact, if they are kept under cover as they should be, and save much brick dust and water or oil when they are to be used again. Many good farmers have a cloth moistened with oil in the field to rub the bright surfaces of implements with at night, to prevent the rust that often attacks them after a day's work, particularly on soils that do not scour. It will be found to be a paying investment.

A NEW WAY OF BURNING STUMPS.

A writer in the *American Agriculturist* gets rid of stumps by boring a hole with a two-inch auger from the top of the stump to the bottom. Another hole is bored near the bottom at right angles to the first and connecting with it. Fire is kindled over the horizontal hole, and the natural draft draws the fire through the two holes, consuming the centre of the stump first and ultimately burning the whole.

ACCLIMATING THE CEREAL AND VEGETABLE CROPS.

With the exception of old experienced seed growers and venders of seed, the knowledge and importance of acclimation is scarcely known in this country. A want of practical experience by American garden seed dealers is patent; the inexperienced greatly predominating.

Indian corn grown north or east of the city of New York, will scarcely produce an average crop in the Southern States short of the third year's successive seeding. English wheat requires no acclimation, but the size of the grain when seeded in the United States gradually becomes smaller, the same as our common bearded or bald wheat, and according to the authority of London bakers, an equal quantity of American wheat will produce more and better bread than English. The same remarks apply to imported Mediterranean wheat.

Winter wheat, rye and barley will produce average crops the third year after successive spring seeding, and *vice versa*.

Vegetable Crops.—The large late cabbage and Savoy seed, imported from England or the Continent, will produce nothing but leaves, or rather unsatisfactory results, till the third year's successive seeding. On the contrary, seeds of Early Yorke and other early crops, head as perfectly as American grown seed. Imported beet, carrot and parsnip for culinary purposes, mangel wurtzel, sugar beet, field carrot, ruta бага and the various yellow and white turnips are coarse, and deficient in saccharine matter—all these require acclimating, or the seed grown from strictly American stocks.

With the exception of the following vegetable seeds, all others not named can be imported with safety, viz:—

Beans—Lima, Snap or String; Cymbalin or Summer Squash, Winter Squash, Pumpkin, Tomato, Cucumber, Egg-plant, Melons, Onions and Lettuce.

The Vetch again.—Since sending you an article for your May No., relative to the Vetch, and having noticed your comments on the same, I will add, if you please, that I recently read an advertisement by a Canadian merchant that he had for sale Vetch seed grown last summer in Canada. If the Vetch will mature seed in Canada, I cannot see why they will not mature in this country. The plant, vines and pods are similar to the garden pea, which requires no acclimation, neither (I opine) does the Vetch. I have sown half an acre with a small quantity of oats and flaxseed. If I am spared I will send you samples cut in the flower and in the matured stalk.

Your cautionary comments are doubtless proper, and if generally followed by other proprietors of agricultural journals, would save the unwary from loss and disappointment. I presume you are aware that I have no pecuniary interest in recommending the Vetch or any other plant.

Vetch seed is black and roundish, averaging the seed of American wheat. No fan screen or sieve would separate it from wheat; but by cutting it in the flower for forage, for which its chief value consists, there can be no risk of mixture. The Roman Catholic Bible alludes to Cocksle and Mustard, but makes no allusion to tares.—*Ploverman in American Farmer.*

THOROUGHLY CULTIVATED FARMS MOST PROFITABLE.

Much has been written and said which are the most profitable, large farms or small ones. One of the peculiar traits of the American character is that insatiable thirst or hankering for more land, with little regard to its profit as an investment, and often without any hope for its decent cultivation.

What results from this too common course? Just what we might expect. The farmers and their families live in discomfort, have poor farms, and wear out their lives to little purpose. Here is a man with 100 acres of land, all he can well manage with his means. Adjoining him is another tract of 100 acres which he is desirous of adding to his domain. He adds it and by that means runs in debt for one-half or three-fourths its cost, thus using up all and more than all his working capital. This capital has enabled him to cultivate his 100 acres at a profit, giving him an income above all expenses, aside from value of land, of six or eight per cent. on that value.

Adding the 100 acres just doubles the investment in land, and should also double the profits. But is this the case? In all our ex-

perience and observation it is not. The per cent. of profit is very much decreased, only a small sum being added to the income from the original farm. Say the farm is what may be termed a wheat farm. On the original farm there were grown 800 bushels, and on the 200-acre farm there are grown only 1000 or its equivalent, instead of being 1,600 as there ought to be.

A poor system and corresponding culture not only bears heavily upon those who practice it, but its influence is wide-spread, penetrating to every branch of industry. Cripple the agriculture of the country, and manufactures, trade, commerce and all business is affected or stagnates. High or thorough culture and management of the soil and special branches of agriculture tend directly and strongly to advance the value of land in any special locality, benefiting not only the farmers, but all classes of society. Labor creates wealth, and nearly all labor is connected with the soil and its products. The too often failure of the cultivator of the soil observed in travelling through our country, arises from trying to farm too much land. More profit would be realized by judiciously employing the capital on a smaller number of acres.—Large farms of themselves are not objectionable, especially if they are thoroughly cultivated. But when only one-half or two-thirds of a full crop, the capital is poorly invested and much of it lying idle.

A farmer, on commencing operations, should sit down and count the cost, whether his capital is sufficient for his undertaking. He should consider the requirements to success, such as drainage, culture of varied crops, proper selection of farm stock, providing suitable shelter and accommodation for the stock, husbanding and judicious application of manure, selection of best qualities and varieties for seed, and the most suitable time and season for planting, etc., and also the adoption of the most suitable tools, etc., for securing the culture and harvesting of his crops.

If there be a deficiency in capital or agricultural knowledge, it would be far better to only attempt to cultivate so much as will best serve to educate, and conduce to skill in the cultivator. The old saying, "a little farm well tilled, a little till well filled," was never truer than at the present day. Thorough culture is the only culture that pays.—*W. H. W. in Western Rural.*

DRIVING FENCE POSTS.

On one occasion the writer desired to erect a board fence around a field which was free from stones, and proceeded on the following plan:—

The line of the fence was laid out perfectly straight, and small stakes were driven into the ground sixteen feet apart. A sharp wedge-shaped pointed crow-bar was procured, with which holes were punched in the ground where each stake was placed. By working the bar back and forth in the ground, the hole was made large enough to fit the post closely, and two feet and a half deep. The post was pointed very evenly on each side, so that it would drive straight. The top was beveled, so that it would not split in driving. A triangular stool with three legs three feet long, and a heavy beetle completed the outfit. The beetle was made out of a piece of soft maple, fifteen inches long, cut from a small tree about a foot in diameter. The bark was trimmed off and the edges were beveled off about two inches; a handle of ash two inches thick was put through the beetle, and was trimmed down so as to be an inch and a half thick one way, and two inches in another. This prevented it turning in the hands when striking with it. When the posts were all ready to be driven, a man held one of them with the point in the hole, while another mounted the stool and drove it down with the beetle. With a little care the man who held the post kept it upright and in a line with the rest. As the posts were driven, two men followed nailing on the boards. These four men completed a five-board fence around a square ten-acre field in one day and a half, making the labor equal to six days' work. Had the holes been dug the job would have taken at least four times as long. The cost of the labor was less than ten cents a rod; the men were good mechanics, or it would have cost much more, their labor at two dollars and a half a day being probably twice as cheap as common labor at half that rate. In addition to the superior rapidity and cheapness of the work, the fence was much firmer than it could possibly have been had the holes been dug for the posts.—*Am. Agriculturist.*