## Better Farming Wanted.

Mr. Harris discourses on this subject as follows, in the American Agriculturist:

I have great faith in good farming. sure that there is no country in the world where good farming, as compared with poor farming, is more profitable than in the United States. Our general agriculture is not of a high standard. There is very little "culture" about it. We plow and sow-and reap what nature gives us. Some times the seasons are favorable and we have good crops. But such crops rarely prove of much benefit to the farmer. They are good for the railroads and all interested in the carrying trade. I do not see any remedy for this state of things, except in better farming.

Better farming would not necessarily give us more wheat and corn for exportation, taking one year with another. But it would give us a steadier We should not have corn at 25 cents a bushel in a favorable season, and 75 cents in an unfavorable one, for the simple reason that better farming requires us to consume more of our corn at home on the farm. Better farming would enable us to keep the millions of dollars which we now send out of the country for wool, barley and garden and vegetable seeds. We could export garden and vegetable seeds. more pork, bacon, hams and lard. And it looks now as though we should be able to export live cattle and sheep to Great Britain. At any rate we could eat less pork and more beef and mutton at home. Our bacon and pork, as it improves in quality, will be in great demand at higher prices. It is clear to my mind that if we raised better crops and fed out more of our produce on the farm, it would be a great national blessing. But it is not necessary to discuss this point. We have to look at things as they are. What you and I want to know is how to make more money by farming. It is hardly worth while asking what would be the effect if everybody farmed in the best manner. As individual farmers we are competing with each other, and selling in a common market. Our aim must be to lessen the cost of production and to raise such articles as will command the best prices.

We can lower the cost of production by raising larger crops per acre, or by keeping such animals as give more milk and grow more rapidly in proportion to the food consumed. Prices depend on supply and demand. In feeding animals we can make close estimates as to the cost of our products, but in raising crops, the influence of the season. of mildew and frost, of rain and drouth and insects, must never be forgotten. Nothing we can do will ever make us independent of the weather. But it is certainly true, as a rule, that the good farmer suffers less from adverse seasons, insects, etc., than the farmer whose land is undrained, poor and weedy. During Mr. Lawes' twenty years' experiments on barley, the least yield on the plot without manure was 15 bushels per acre. year the adjoining plot, dressed with barnyard manure, produced 48 bushels per acre. The largest yield of the unmanured plot during the twenty years was 44 bushels per acre, while the plot adjoining, with barnyard manure, produced 65 bushels. In the favorable season we have on this continuously unmanured plot 44 bushels per acre, and in the unfavorable season 15 bushels, the average of the 20 crops on the uumanured plot being 25 bushels per acre. In the unfavorable season we have 15 bushels without manure, and over 48 bushels with manure. In the favorable season we have 44 bushels without manure, and 65 bushels

Now, in talking to a man like the deacon, we are pretty sure to hear of some great crop that was raised with little labor and less manure. a man had raised such a crop as the above, he would say, "I had a piece of land that had no manure for some years, that I sowed to barley, and got 44 bushels per acre and 2,520 pounds of straw." He would forget to tell that the very same field, with precisely the same treatment, only yielded 15 bushels on another occasion. He would keep on year after year, hoping to get 44 bushels again, overlooking the fact that when he had a large crop others had a Targe crop also, and the price was very low. Such an unusually favorable season in this country with our large area would send barley down to 50 cents a bushel, while an unfavorable season would be likely to send it up to \$1.50 to \$2. Assuming such to be the case, let us look how the matter would stand:

NO MANURE.

Bad Season -- 15 bushels at \$1.50. . . . . . . . . \$22.50 Good Season—44

Bad Season—48 bushels at \$1.50......\$72.00  $50 \dots 32.50$ Good Season -65 Bad seasons, like bad things generally, are more lentiful than the good. What we call good

plentiful than the good. What we call good seasons are the exception; bad seasons are the rule. After deducting the seed, the interest on the land, and the expense of plowing, harrowing, rolling, drilling and reaping, it will make a vast difference in the *profits*, whether we get in a bad season 15 bushels or 48 bushels per acre.

In this country there is even a greater difference between good and poor farming in a bad season than the figures taken from Mr. Lawes would indicate, for this reason: His unmanured land is as clean as he can make it, while in a poor season our poorly farmed land would be pretty certain to be infested with weeds, and these would reduce our vield to such an extent that the crop might be hardly worth harvesting.

Looking at the matter in this light, I hope to be

excused for again and again urging the importance of better farming. I have not much patience with those who say it will not pay. If you farm at all, it will certainly pay to farm well. It is slow work improving a farm, but stick to it, and every year the work becomes easier, and the pro-

We must make more manure. Manure is the farmers' capital. Capital is accumulated earnings. If I work for \$1,000 a year and spend \$1,000, I am no better off at the end of the year than at the beginning. But if I can, by working a little harder, earn \$1,200 a year, and, by practising a little economy, live on \$800, I can lay up \$400. This \$400 is capital, and begins at once to earn money for itself. Capital is accumulated earnings. It is what is left of our profits or wages after deducting the expenses of living. Manure is accumulated plant-food. It is what is left after rais ing and disposing of a crop. If your land, as now worked, is capable of paying you 20 bushels of corn and a ton of stalks per acre every year, and you sell the whole, your land is no richer in available plant-food. You are making no manure. You spend all your wages. But if by extra cultivation, by setting free more plant-food from the soil, you can make your land pay you 40 bushels of corn and two tons of stalks, and instead of selling it you feed it out to your cows or sheep and pigs, and are careful to save all the manure, then your forty bushels of corn and two tons of stalks, less about 10 per cent. removed by the animals, becomes capital, and begins at once to earn money for itself.

It is worth while making a great effort to get a little capital, in the form of manure, and not always to be dependent on the yearly wages which the soil alone can pay us. How this can best be done, depends on circumstance. I think it will sometimes pay to gather leaves for bedding. I am sure it will pay to scrape up the barnyards, and not let the droppings of our animals lie exposed over a large surface, for the rains to leach out all the soluble matter. On my own farm I gather all the potato tops, and use them for bedding the store If not required for this purpose, I should put them in a heap and mix them with manure.

MEASURING HAY IN BULK. - A. B. Allen, in the Tribune, says :- So many things have to be taken into consideration in calculating the weight of hay in bulk, it makes it difficult to get at it precisely. For example: fine, new mown hay, like red top or herd's grass, would require 500 cubic feet for the ton; timothy, 550; clover, 650; coarse meadow hay, 700 or more. After being stacked 30 days the bulk would be decreased from five to ten per cent., possibly more, according to the size of the stack and the pressure upon it. Again, hay will vary somewhat in measurement, according to the time it is cut. If this be done when it is just coming into blossom, as it always should, it will pack closer and weigh more per cubic foot than if left till the seed begins to ripen, and the stalks and leaves have grown coarser and become drier. Good judgment, and some experience in measuring and weighing are required to get at this correctly. A neighbor of mine informs me that he once had the curiosity to weigh his timothy hay as he put it into the barn in July. He sold it about nine months after, and on reweighing it as it came out of the barn le found, greatly to his surprise, that it had shrunk to within a fraction of 25 per cent.

MR. M. G. CLEMENT, of West Amesbury, Mass. has planted two acres of land with chestnut and walnut trees, from which he expects to gather a 50. ..... 22.00 crop in twelve years.

Garden, Orchard and Horest.

Seasonable Hints.

In getting ready for spring vegetables do not fear to pile on the manure. It is the rank rich growth which gives the agreeable tenderness to them, and without an abundance of manure this cannot be done. Deep soil is also a great element of success. Though we do not favor sub-soiling and underdraining for fruit trees, we regard it as very profit-

Asparagus beds may have the soil raked off them a little, if it was thrown up from the alley-way in the fall. It allows the sun to get te the roots earlier, and the crop is forwarded thereby. If the beds are poor, they may have a dressing of guano, or superphosphate, which has been very beneficial to this crop. It has become almost a stereotyped recommendation to have "salt applied," but there is a good deal of the humbug about it. In dry, sandy soils it does a little good, and a little in whatever manure it applied is acceptable to them, but more has been made of the salt theory with asparagus than it deserves. Asparagus beds may be got ready as soon as the ground is sufficiently dry to admit of working. A deep soil is all-important, two feet, at least, and a situation should be chosen that is warm, and yet not too dry. The roots should be set about four inches under the surface, twenty inches or two feet from each other, and the rows eighteen or twenty inches apart. Large, fine asparagus cannot be obtained by crowding the plants; strong two and three-year-old plants are the best, although, in good, rich soil, one year old plants will often bear a good crop the year after planting. The longth of time asparagus requires to come into bearing depends much on the soil. It is useless to attempt raising it in poor ground.

This is generally supposed to be the pruning sea-Orchard trees generally get too much prun-In young trees only thin out so as not to have the main leaders crossing or interfering with one another. Or when a few shoots grow much such stronger than the rest, cut these away. Insist on all the branches in young trees growing only on a perfect equality. On older trees which have been in bearing a number of years, it will often benefit to cut away a large portion of the bearing limbs. By a long series of bearings, branches will often get bark bound and stunted, preventing the free passage of the sap to the leaves. In such cases the sap seems to revenge itself by forcing out vigorous young shoots a long way down from the top of the tree. It is down to these vigorous young shoots that we would cut the bearing branches away. One must use his own judgment as to the advisability of this. If the tree bears as ine and luscious fruit severe work need be done, but if not, then now is

the time. In young orchards some species of scale insects are likely to be troublesome. They should be killed by washing at this season. If the trees be very badly infested, cut back the young shoots, and the stouter branches can then be more thoroughly done. Some people use weak lye for washing, with good results; we do not object to some lime and sulphur going with it. Old trees are very much assisted by having the rough bark scraped off of the trunk and main branches, and then coated with a similar wash. Never mind what people say about stopping up the "breathing pores." Try it once, and you will always want

to repeat the practice. And above all look after the nutrition of the

good corn will grow good fruit trees, which is all right; but they should add that, like corn, they require regular and continuous manuring. There are some parts of the country where corn can be successively taken for a half a life time without manure; on these soils we need not manure fruit trees, but in all others we must, to have good re-This is particularly essential where trees are grown in grass, as both the trees and the grass require food. Where trees are grown in grass, we prefer top dressing in June or July, but if it has not been done then do it now. Where trees are kept under a clean surface culture, the manure is, of course, plowed or harrowed in with the crop in the spring of the year. To know whether trees require manure or not ask the leaves. If in July they are of a dark rich green, nothing need be done to them, but if they have a yellow cast, hunger is what is the matter. This, of course, is supposing they are not infested by borers, in which case they will be yellowish in the richest soil.

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