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SALEM, FRIDAY, MARCH 14, 1879.

Deep and Shallow Plowing.

Few subjects attract more attention and give rise to more discussion and want of agreement than that of the depth of plowing. Many do not consider the very important feet that deep or shallow plowing depends upon the nature of the soil. The truth is, there are many soils in which if one plow deep he may find great profit in doing so; but, on the other hand, there are thousands and thousands of acres of land where it is sheer madness to plow deep. On flat clay land, where water cannot drain rapidly away, and where the lack of drainage is the bane of the cultivator, it is found by experience that a shallow but rich surface soil is much better than a deeply stirred one. And the reason is obvious. If water be an injury, and it cannot get into the soil by reason of the hardness of the subsoil, the rain will pass over the surface to the open ditches, which always have to be made in a flat country. If we loosen such soil deeply we only harbor more of our liquid enemy, and this counterbalances what otherwise might be a good thing in a deep soil Besides these, there are other considand we turn this down into a still tion.

me, at least) most interesting questigent farming is learning to adapt methods to conditions and circumpoorer subsoil, we bury what little good there might have been in the surface soil far below the reach of the roots.

A little learning is undoubtedly a dangerous thing in farming. There is ing who knows much prior to experino department of industry wherein circumstances after cases more than in this. While deep plowing is an excellent thing when circumstances suit, ing is an experimental method of gainthere are innumerable cases when it is wise to go the other way.

Potato Culture.

Notwithstanding that for fifty years goes people have been experimenting on seed a foot apart or three or four feet and been mowed off, they died. apart, like corn in hills; but it is rare Mowing, then, in this case, killed are not tempted to pursue these prace process. Now for another. tices, and they usually drop back into the good old way.

thus prevent their going to seed—and of the Sun, sweep hack the Cosan with a text of the facts in these various improved ways, as they have been given to us. Indeed, we believe they have generally been as represented; but yet we believe that as a rule there is not be troublesome. Another method is a very good one—pasturing. All this is the main point in destroying noxious seeds of any kind. If you noxious seeds of any kind into debt for acres of rock-ribbed hills into debt for acres of rock-ribbed hills and stinted valleys? If a farmer with but little capital to run the sum of t take a piece of worn out sod land, and. fond of them. after putting a good dressing of halfrotted stable manure, plow it down your fence corners and along your over the potato sets three or four inch- turning rows, and go to seed, you will es deep, the sets 18 or 20 inches apart, never get rid of them. Keep them the rows about 30 inches. As for the down; pull them up, and cut them off, size of the sets, we hardly think this all over your place. But, if you let of so much consequence as the condi- them grow in your oats, wheat, and after the plant has once left the parent clean grain, and are careful, sensible, al, as many persons protest they have mer, too. So much for wild oats. had just as good crops from small potatoes as from cut pieces of larger ones, the sprouts.—Germantown Telegraph.

Working Horses without Shoes.

hard, flinty hoof, on a concave can well go most of the time without oats, fern, and other injurious weeds, shoes, unless he be put to heavy is to break up the land early in spring, drawing on slippery roads. It is a harrow, and roll it, so as to make it as question that must be decided upon level as possible, and mow off the vegfor each horse for himself; and the etation with a two-horse mower, every character of the hoof, the shape of the two or three weeks, till near frost. foot, the uses to which the horse is You will thus keep down all noxious put, and the roads he travels upon, all vegetation, and prevent their going to Journal.

For the Willamette Farmer.

KILLING WILD OATS, FERN, and SORREL ing these intolerable nuisances.

Killing weeds is a double gain— Improves the land, and helps the grain. Beautifics the farm. Adds an endless charm; And, oh, it brings plenty of cash— And, I guess, that 'settles the hash.'

It has been stated that "he who causes one blade of grass to grow does not injure the grain materially. where none grew before, is a benefactor to humanity." If this is true, every farmer who kills wild oats, fern, and sorrel, is a benefactor to his country. And this is perfectly true, for the Clean fields bring clean grain: clean farmer, by killing weeds, benefits him- grain brings clean cash. That's what self directly, and others indirectly .--The more noxious vegetation he destroys, the more grain he raises. In the same proportional ratio as the one and that's what we don't want. is destroyed the other is increased. Clearly, then, it must be an important matter, in a productive point of view, to understand how to adapt means any rigid rule. The soils of no two adapted to ends. If the means used fields agree precisely alike, or would are good, or the best, the best results be alike benefited by the same treatmust follow. Experience, and experirience alone, will teach us in this (to alike. All is variety, change. Intelli-

Franklin said: "Experience is a dear chool, and fools will learn in no other." If this is true—and I suppose it is—we are all foels, for there is not a man livence. I know of no way of gaining Information except by learning, either theoretically or practically, and learning information, even if you learn it dreaded, a trayful of quick lime placed from others' lips or pens. A practical process may be better (and possibly is) than a theoretical process. So here

And, first: I once bought eight bushpotato culture, the old way is still fol- els of wild oats, and sowed them, as I lowed, as a general thing, and there would common feed outs, for meadow, has been but little advance in the ways or rather for hay. Now mark the reof our grandfathers. Now and then before they bloomed-I got three tons mal, and is said to have given satisfaction last and are struggling under their bur- and the governor of the district ordersome one will arise who contends for to the acre of fine hay. The next year, whole potatoes, or for cut pieces; or it season I got one ton per acre, and the may be for deep planting or for shallow third year, in spring, there were no planting; or for large potatoes or for wild oats. Then I killed them off at small potatoes; for fermented manure two mowings, not letting them go to or long strawy litter; or for placing the seed; and all the seed having come up

that any one continues in any of the the wild oats. What is the conclusion? courses. We have sometimes read of Here it is: You mow wild oats two or people who have made large profits by three years, never letting them go to working some of these plans; but they seed, and you kill them. That's one

Sow some kind of grain that will ripen before the wild oats; you can It is not for us to dispute the accurations prevent their going to seed-and

Now, if you let wild oats grow in tion of the soil. It is the fitness in this other grains, you are but sowing them respect which does the business, for broadcast over your farms. If you sow root it depends wholly on the soil for energetic, and keen, good bye to weeds its food. Perhaps one large piece is and wild oats. If you are sluggish, better than a whole small potato, as stupid, lazy, and dull, you invite wild there will be a less number of sprouts; oats and encourage every fifthy weed. but even this is in a measure theoretic- | Energy makes the man, and-the far-

Now for sorrel. This is an evil in the shape of a weed; a detestable thing, in spite of the supposed objection to and hard to kill. It sours the soil, chokes out the grain, and takes our meadows. This is a far more troublesome visitor than wild oats or fern. Many of our exchanges, both in this Wild oats and fern do not kill the soil, country and England, have wasted a sorrel does. Where sorrel has formed great amount of space in discussing a solid mat or turf, nothing else will the feasibility of working horses with- grow Sheep, if starved to it, will out shoes. If those engaged in this partially, eat it. Goats eat it, though discussion had been practical men, they are not passionately fond of it. they would have known that it is a They eat it in hay, and, in this form, point which cannot be settled in news- it is worth more as feed than any other papers, or any where else. Some horses to the husbandman. Yet it is poor can work without shoes, while others pasture, poor hay, and an infernal pest! cannot. A horse that can go barefooted The only way I have succeeded in dewith impanity on the soft dirt roads of stroying sorrel is by shallow plowing, our flat Western prairies, when taken and often, through the dry months. to the flinty hills of New England will By this means you kill the roots, and need shoes. Most horses can do the thus prevent the top from producing Before Taking is work of the farm in summer without seed-a double gain. Some use a (soshoes; but when the hard, frozen, icy called) fern-killer, running over the roads of winter have to be encountered, land every two weeks, cutting off fern, no horse can keep his footing and sorrel, and all other weeds, and thus draw a load without them. Horses bleeding them to death, for, the leaves with that feet, and shelly, brittle being the lungs, if we keep them cut and could by all wholesale and r

One copy, six months (35 nur bers) 1.25 don't break away so as to make his feet But, you will say, all this takes work One copy, three months (18 numbers)75 sore, and if he can keep his footing so and time. True, but what are we to as to do his work easily, he does not re- do? Let all these abominable pests quire to be shod. If the reverse is grow? Surely not. Then we must true, he must be shod. And that is all labor, and kill them out, or they will there is of it.-National Live Stock kill us out-ruin our fields, and, consequently, us.

I wish others would give us, in the FARMER, their experience in destroy-

The big fern is comparatively easy to kill. Why? Because it makes a mat of roots near the surface. Plow and harrow these up to dry in the sun, and you will soon get rid of it. The little fern is difficult to kill; its roots run deep; but it is generally thin, and

Now, I have said, plainly, my way. Let us hear from others. Weed-killing is not only a "weedy" question, but a deep, interesting, and important one we are all after.

But weedy fields bring weedy grain, and weedy grains bring weedy money,

Rock Rapids, March 1, 1879. A. F. D.

Agriculture can not be carried on by ment. No two seasons are precisely stances.

Wheat growing in Great Britian is slowly declining in area; the average yield has been increased 1 to 1] bushels in the past generation, 5 bushels withn 100 years, and now is estimated at 28 bushels.

In damp closets, store rooms, safes, and other places where mildew is there will prevent it.

The hogs in this country are double the value of the sheep, and half the value of the cattle.

NORMAN STALLION.-Those who want good horses will be interested in reading the advertisement of T. J. Edmondson in this usue.

Mr. Taylor.

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Thus it is with a valuable medicine: Dr. Aug. Kaiser's, celebrated German Pulmoni-Elxir, through the jealousy of rivals, has met with the most bitler opposition, and apparently almost insurmountable obsacies have been thrown in its way; but its opponents might as well 'ry to chance the course of the Sun, sweep hack the Ocean with a broom or put out a prairie fire with a tear.

State protest against the truth of such statements.

The lessons which farmers are now receiving in regard to incurring large debts, will not need to be repeated to this generation, at least to those who are made wiser by experience. Is it a question of expediency merely, or of right and justice to all concerned, for a farmer with but little capital to run

The Centaur Lintments are of two kinds The White is for the human family; the Yellow is or horses, sheep, and other suimals. Testimo the Office of THE CENTAUR COMPANY, 46 Dey Street. New York City.

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proposes to cut a ditch five feet wide at the top, one as a half feet at the bottom, and two fi deep, throwing this dirt two feet from ditch, for 33 cts per red. The he guarantees, or no charge. He has three machines no in operation—one each in Linn, Benton, and Lane con ties.

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Counting the Cost.

Directing Macrine.-We call attention to them that they, more than any other fire to with the aid of brushwood. advertisement of Mr. O. C. Taylor, in another men, are growing rich. The constant column. His ditching machine is highly spo-confronting and pressure of debts, the ken of, and he guarantees satisfaction. Those resulting forebodings and anxiety, the wanting ditching done would do well to see low prices and heavy taxes, are a constant protest against the truth of such'

right and justice to all concerned, for a man can possibly weigh it out, and faster than farmer with but little capital to run the same force can pack the same fruit in fifty pound boxes, and at least cast, as the weight of be patent to all observers at the presbe patent to all observers at the pres-ent time. Farmers and others who Mr. Collver. The machines are made and sold have paid for their present farms and at the furniture manufactory of F. J. Babcock, homes, need not hesitate, at fair prices, to gradually add to their acres or buildings as they need, incurring debts Preparations are wrapped around every bottle, and therefor which they may be able to may be procured of any druggist, or by mail from meet. Such gradual additions will not distress the family, and often prove a stimulant to industry and economy, and thus tend to wealth. But to incur such heavy risks as many have done, is most egregious folly. A shrewd and successful business man, who owns hundreds of acres of land, to'd me he never bought or run into debt for any land that he coud not pay for at any time, if necessary. With so many examples of failure on account of excessive debts, is it not the dictate of wis-

We Want Education.

The members of the order of Patrons of Husbandry have much to learn and much to discuss, and it will take a long time to bring farmers to a true knowledge of the different subjects that affect their interest in common with the interests of every other industry. We want to know how better to work our soils, fertilize and preserve our lands, and prepare the products of our farms for market. We want to know how better to adoro our houses, plant gardens and lawns, make orchards and vineyards, and render our homes attractive and happy. We want to know how better to judge men and to learn their motives, when designing dema-

where all wealth comes from-who cre ates it, and who hoards it. We want to know how monopolies originatewhere they are created, and for whose benefit they are run. We want better to know the cheapest way in which governments can be supported, whence comes the revenue, and who are the beneficiaries of the national treasury. All this, and much more, may be learned by association and discussion in our granges, if we have the patience and energy to attend the meetings regularly, and each one do his or her part in the grand work of education and elevation of the agricultural masses of this country .- Farmers' Friend.

A Cardinal Principle.

The Master of the Maryland State Grange, in his address at the sixth an-

"One of the cardinal principles of our order is co-operation-a working together as individuals for the good of the masses. Now, to accomplish this, the first step is to get the individuals together, and just here is our weakest point. Many think, if they pay their dues regularly, and support the agency occasionally, they are doing their full duty as members of the order. Far from it. I can assure all such that the very life of the organization depends, 1st, upon the regular attendance of the membership upon the meetings of the subordinate grange; 2d, upon our honest support of the grange agency .-These are facts which I desire to bring home to the heart of every true patron in our state. It will not do to say our meetings are dull and uninteresting, for it is clearly the duty of every one to be on hand and give his or her mite to overcome this very dullness. We OFFICERS OREGON STATE GRANGE. often hear most interesting and instructive discussions arise from a casual remark of a generally quiet member. We are each and every one links in the great chain, and, to be ready for use, we must be on hand and in the shop where the chain is being welded. As masters of subordinate granges, let me urge you to increased vigilance on this point."

> The next annual session of the National Grange will be held at Canandaigua, N. Y., Nov. 19.

The Colorado potato beetle has arrived in the dominions of the Czar. On In common with most other classes, information of its appearance near

farmers feel the pressure of the times. Olezko, the potato tops were burned, dens. The flattery of agricultural and ed the infected fields plowed up, and political orators will fail to convince poured over with petroleum, and set

> Grass is the basis of agricultural wealth.

FRUIT-PACKING MACHINES.

W. A. Collver of Coos Bay, is inventor of a oress for packing dried hops, fruit and vegetablss of all kinds that have been properly dried by any process, and A. B. Collver is now canvassing the Willamette Valley for the sale of these machines. They cost \$25 to \$35, according to flaish, and will pack the fruit in twopound packages, in paper boxes, as fast as a nd gives a practical exposition of its working Salem. Specimens of the packed fruit can be seen at the office of the Wiltamette Farmer. At present Mr. Collver is canvassing the east side of the river, between Salem and Portland.

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ive debts, is it not the dictate of wisdom to heed the suggestion of first counting the cost before laying the shoulder to the terrible burden of debt?

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