FOR FARMERS AND GARDENERS.

How to Hoe Corn.

The following article, from a correspondent of the American *Agriculturist*, contains good logic:

When I was a boy, and went into the field to hoe corn, I was quite puzzled to know what my father meant, when he directed us to be sure and 'hoe where the corn wasn't,' But after following him a few days, and noticing the pains he took to have all the ground BETWEEN the hills well stirred, as well as the weeds cut up, and particularly when I saw how careful he was, not to disturb the ground deeply very near the young plants, I understood his meaning. In a long acquaintance with corn I have observed enough to make me think he was right. The weeds must be cut up, root and branch, to have good corn, that's certain, and the ground must be kept loose enough to let the heat get in, and the moisture pass up from below, and to allow the spreading roots to make their way easily through the soil in their search for good picking. But I've seen a good many slash away with the hoe close around the stalk, when every cut there, if two inches below the surface, must have broken quite a number of the growing roots. It certainly can not be of much use to feed corn well, if you then go to work and cut off its mouths, for the roots are mouths to the plant. So I always cultivate highly where the roots have extended, which is about the length that the stalk has reached above the ground, and when the corn is up breast high, I wouldn't let a man go through the field with a plow, if he'd pay wages for doing it and find himself. I do not believe in hilling corn; making the field look like a crop of young flag-staffs planted on small pinnacles. The stalk has grown up into the air where it was intended to stay, and it isn't natural to partially bury it alive. People do it, to prop it up, so that the wind will not level it. But if it be left alone, it will do its own propping, by sending forth extra roots just above the surface, which go out and anchor it all around. I have seen a field that was hilled, laid flat by a storm, while the next one to it, that grew naturally, stood up after the blow, as straight as a militia captain on training-day. When corn is hilled, it will try to send out a second growth of supporting roots, but neither the first nor the second growth will then become strong enough to be of much use, I therefore try to leave my ground nearly level, and thus also save the roots the trouble of diving down again, to get below the gullies which are sometimes left after the first plowing.

JONATHAN.

"Jonathan" might also have included potatoes in his allusions to "hilling." It is held by many that hilling up potatoes increases the yield; which is a great mistake. When you talk of hilling pea-nuts, we understand the necessity of it; but, in the cultivation of corn, potatoes, peas, beans, &c., &c., we are not aware that such a necessity exists at all.

We have seen, this season, potatoes hilled up so as to leave a deep trench between the rows.—This practice we should consider useless, if not positively detrimental to the potato crop—as inciting new side roots after the young potatoes had begun to set—even in a country well watered with rains and where irrigation is not known; but, in this country, where all our crops are dependent upon irrigation, this practice is at once injurious and unreasonable, because, when the water flows so far below the soil surface, how can the plants obtain the moisture requisite to promote vigorous growth and abundant crops.

The potato, while forming and maturing the sets, should have a full supply of water—and that water should be applied as near to the surface and to the stem of the plants as may be without overflowing.

The same rule will apply with equal force to our whole system of soil culture and irrigation.

"SOILING" is a term commonly used among practical Eastern farmers, but not so generally understood here, because the practice of "soiling" has never been much in vogue among us. The term "soiling" implies the "confining of animals to stalls or yards, during summer, and feeding them with green food, cut daily—such as corn, millet, oats, sugar cane, clover, lucerne, turnips, etc."—more generally adopted throughout England, however, than in the United States.

The advantages claimed by this mode are thus stated in the *Agriculturist:* Food is consumed with less waste; there is a great increase in the amount of good manure saved; the animals are less exposed to the heat of the sun, and to flies and other insects; a larger proportion of the food goes to the production of fat, muscles and milk, when animals are kept quiet.

These are important advantages for those living in this city who keep cows; but where good pasturage may be had at a moderate distance, as is the case at many of our settlements, soiling would not be so advantageous.

In Great Salt Lake City, those who keep up cows, generally send them to feed on the benches or on the Jordan bottoms, a distance of from two to three miles—which being traveled morning and evening, imposes upon the animals a toilsome journey, in the hot summer days, of four, five or six miles. Under such circumstances, even the best cows will fail materially in the quantity of their milk.

During the summer months, when the grasses are parched and dried, it would doubtless be most economical to confine cows in the barn yard, or other place, where they can be sheltered from the noonday sun and heat, and have a bountiful supply of some succulent crop ready to cut and feed out to them in daily rations. The increased yield of milk will at once repay the extra cost, while the cows themselves will be kept in good condition and better prepared in fat and flesh, for the coming winter.

Corn, Chinese sugar cane, Hungarian grass and oats are among the best crops for soiling. When planted or sown, as the case may be, in small patches at intervals of five to ten days, green fodder may be secured till frost comes.

A FARMER who has "no time to read" has stopped his *Agriculturist*. This same man has a family of children grown up around him. The editor pointedly remarks:

FIRSTLY. There are labor saving implements enough noticed each year in any respectable agricultural paper, to save much more than time sufficient to read not only a paper of this description, but several books besides.

SECONDLY. If the boys are educated to farming by the process of being kept at it early and late, with no interest in the business awakened by the facts and thoughts on the subject, which such a journal presents, some of these days, that man will want help on the farm, and his boys will be "seeking their fortune" in some more inviting calling.

THIRDLY. The men who get their living by their wits as they call it, or who in plain words live by swindling the ignorant, will most likely find at least one good customer in that neighborhood, and make him pay for his ignorance ten times as much as he refused to expend for information.

FOURTHLY. "Where there's a will there's a way" and a man can find time for anything which he considers of sufficient importance; and also "when there's a won't there's a way," and there can be but little doubt that "can't find time" is merely another, perhaps easier way to say "haven't the disposition."

When a man begins to think he has "no time to read," he forgets that the information contained in a good newspaper, if judiciously improved upon, will afford more profit than could possibly be realized from the appropriation to labor, of the time that might be occupied in reading the paper.

Weeds, we notice, are in a most flourishing condition in most gardens throughout this city, and promise a prolific yield—'of what?'—asks some astonished reader. Why, of seed for another season's crop! 'Well,' it is asked, 'what would you do?' We answer, root them out of your gardens at once!—and do not let one of them, if you can prevent it, deposit its seed on your premises. By pursuing this course yearly, we will not say that you will wholly rid yourself of pestering weeds—but, you will have a better prospect of reaping fair crops of more wholesome vegetation.

The Potato Worm is doing great damage to the potato tops throughout this region. Care should be taken to kill them off as speedily as possible. Aside from the injury to the potato tops, if these worms are not destroyed, they will soon enter the ground, where they will be transformed into a chrysalis state and next year, in all probability, they will be much more destructive than the present.

Examine, also, your tomato vines. It will at once be seen where the worms have commenced their operations by stripping off the leaves and blossoms.

Tobacco Plants, very thrifty, we noticed growing in the garden of Mr. Geo. D. Watt, a day or two since. A new species called the 'Grain Tobacco' seems to excel all other varieties in luxurant growth. The plants of these new species are rather dwarfish, the leaves large, of a handsome oval-shape. It bids fair to surpass in yield all other varieties of tobacco as yet introduced here. On its flavor we are not now prepared to pass any opinion.

Sayers has shown us his Blue Surprise Pea—which he says is the choicest pea in the Valley. It is hardy, prolific, of good flavor and comes into bearing immediately after the early June, and preceding the Marrowfat. This choice pea may now be had at Sayers' garden. Price, seventy five cents per peck. We call attention to Mr. Sayers' advertisement in this number.

More Black Walnut Trees.—Since the publication of our article on the black walnut, in No. 16, we have been reliably informed that black walnuts, in this Territory, were first planted in the gardens of Prests. B. Young and H. C. Kimball, where the trees are now growing and have borne for two or three years past. The present year, they are very full of fruit.

Every Young Man—says an old Turkish adage—should plant a tree under whose shade he could recline in his old age. The adage is a good one. Plant one tree, at least, young man!

EXPERIMENTS ON VEGETATION.—To improve any variety or ascertain the best modes of culture, experiment has never been found fruitless. It is generally thought that only professional gardeners have any right to experiment in the soil; but this is a mistake. Read the following, from the June number of the American *Agriculturist:*

We should consider it an important point gained if we could induce each of our readers, or any considerable number of them, to carefully conduct a single experiment in cultivation, during the present season, taking for a subject any plant or plants that may be most convenient. A small plot of ground, or even a pot of earth may suffice for this purpose. The observation of the effects of a fertilizer, or of the growth of a plant under different circumstances, may assist in determining questions of the greatest possible interest to tillers of the soil. After all that has been said and written about the growth of plants, how little do we really know upon the subject. Scarcely two writers are entirely agreed as to even the first principles concerned in vegetation. Though scientific knowledge may be necessary to draw correct conclusions from facts observed in vegetable growth, still, facts alone can give a sure foundation for scientific knowledge; and the very humblest mind can observe and collect facts.

To illustrate what may be done. Suppose you plant two seeds of the same variety, as nearly alike as you can select, in separate boxes, each containing the same kind and weight of soil. Cultivate and treat them in exactly the same manner. They will no doubt very nearly resemble each other, but they will also present well marked points of difference. One will have longer stems, or more leaves, or greater abundance of flowers than the other. Why? Science at present can not answer the question. She may conjecture, but until the careful experiments of perhaps hundreds of observers have been collated, there can be no certainty in the matter. So with many questions of very great importance; additional facts alone can lead to right conclusions and practice.

It is true that each year's cultivation of the soil is adding to our store of facts, but how many more might be obtained if each cultivator would devote a small portion of his leisure to the study of some one plant, with a view to find out by experiment all that could be known about it; or better still, perhaps, to be able to give a satisfactory answer to some one question concerning its habits or its needs.

But leaving out of the question the importance of such experiments to the advancement of knowledge, there is an inexhaustible fund of rational enjoyment in conducting experiments, especially such as we are now speaking of. Let a person watch the development of a single plant from day to day, with a view to ascertain facts, and each successive stage of its progress will afford new delight. The variety of subjects for investigation is almost endless. Probably the greatest interest would be taken in endeavoring to ascertain for yourself the truth in regard to some point as to which you have doubts. For example, it is stated that there is a considerable difference in the time of maturity of potatoes raised from eyes taken from different parts of the same tuber. Can you tell about this? With a few potatoes, a rod of ground, and a few memoranda of the time of planting, blossoming and ripening, you can in one or two seasons gain much useful information. The value of different manures may be tested, new varieties of seed tried, new fruits originated by hybridizing—in short, the taste and circumstances of each individual will suggest topics for experiments sufficient to employ his leisure pleasantly and profitably. Try it.

Such experimenting may be conducted to a highly satisfactory issue by almost any person who has a plat of ground and a reasonable fund of sense. An hour or two each day will be all the time required.

Soap Making, we presume, is a science with which most, if not all of our farmers, at least, are somewhat acquainted. If any of them buy their soap from the stores, we are not sorry that they are compelled to pay high prices.

The Ohio *Cultivator* furnishes the following plain directions:

In order to keep soap-grease clean and sweet during summer, run off some lye and boil it down until it will eat a feather, if put into it. Then put it away in an iron or other vessel, and throw your meat-rinds and scraps therein. When you make your soap, boil down lye as before, put it into an iron kettle, add this grease with other, if you have it, and let it boil, and stir occasionally. In order to test the proportions of grease and lye, take some out into a dish, let it cool, and, if it does not get hard, your soap needs more boiling and more lye. If too much lye, it will settle to the bottom, when add more grease and boiling. The experienced can test the presence of too much lye by its keen bite, and its absence, vice versa, by a touch of the tongue. A half day is time enough ordinarily to make a kettle of soap, which, when done, should jut out like gingerbread.

So far as practicable, every family should make their own soap. Those who prefer to buy can now obtain a very good article, home manufactured.

Hungarian Grass.—Br. Watt has a small patch of this noted grass. It looks well, covers the ground thickly and we should judge that it will fully realize the expectations of all who have cultivated it. We trust care will be taken, the present season, by all who have any portion of ground sown with the Hungarian grass, to save the seed.

The Middle Eyes of melon vines may be profitably pinched out, when the runners have extended two or three feet. This will cause a more vigorous growth of those branches on which the fruit is produced.

HIRED HELP.—There are few farmers who do not, more or less, hire help during the seasons of planting, harvesting, &c.—some with evidently more success and profit than others. The following excellent suggestions "About hired Men" we find in the *Agriculturist:*

We have had frequent occasion to notice the different "luck," as they call it, which employers have had with their hired help. We knew a Mr. P. who was for ever in hot water with his men. They couldn't be trusted out of sight. They would idle away half their time, slight their work, abuse the horses and cattle, and waste more than their help was worth—such was the frequent complaint of them and to them. On the other hand they unhesitatingly declared, that there never was such a driving, miserly, surly, and altogether contemptible man as their employer. From early summer until their employment ceased in the fall, there semed to be a continual strife between them; each aggravating the other, each apparently studying to find the limit of human endurance, and it sometimes happened that actual violence was resorted to a hand-to-hand encounter with one or more of the men, followed by prosecutions, law-suits, and costs to pay.

But neighbor G. never appeared to have such difficulty. He frequently hired the same men employed by Mr. P. the previous season, yet all went smoothly. His work was done in season, and well done; although they were often away from his observation, there was no disposition shown to take advantage of his absence, and he used to speak with pleasure of his "excellent hands." Yet he never was heard to scold, but often to praise, and if fault was found, the offender alone knew of it. This we apprehend was one secret of his success. He remembered that they were men as well as "help"—and as a man he knew that appreciation is one of the highest stimulants to exertion, and that fault-finding in presence of others, sours the feelings and disheartens from effort. The man who takes as much pains to find points to commend in those in his employ, as he does to discover their defects, will soon see the benefit, in cheerful readiness to work and endeavor to please. Scolding never did any good. A man will listen if you tell him his faults, however plainly, if it be done with mildness and in private.

Too many men pay but little regard to the physical comfort of their "help." They are kept on the coarsest, sometimes the meanest fare. They are sent to sleep two or three in a room, often in the unfinished chamber of an outbuilding, and on beds fit only to do pennance upon. Then too, the men are not only kept at their work "from early dawn 'til set of sun," but one furrow more must be turned, or one swath more mowed after the full time of a day's work is completed. Men are easily affected by what touches physical feelings. Generous fare—it need not be expensive—comfortable lodging rooms, ample noon rests, and prompt "turning out" from the field at night, will be more than repaid by the cheerful spirit and "working with a will," which will be given in return.

Another cause of much difficulty will be found in the whisky jug or cider pitcher carried into the field. Although the men may for a time seem to do more by the use of this extra steam, experience has many times proved that strictly temperate men can better endure the severe labors of farm life, while seven-eighths of the quarrels and collisions, which disgrace too many, otherwise peaceful, communities, originate from the use of alcoholic stimulants.

A great point will be gained, if hired men can be brought to feel an interest in the success of the farm. Sometimes a good way to procure this, would be the offer of extra pay, provided the amount of the crops could be brought beyond the average yield, so that each would feel a personal interest in doing his work well. It would take very little calculation to show that several bushels per acre might be added to the product of each field, by better plowing and more careful cultivation of the growing corn or other crops. The subject is certainly worthy of careful consideration, for most farmers are, to quite an extent, dependent upon the labor of others.

If hired men cannot be induced, by uniform good treatment, to "feel an interest in the success of the farm" and in the consequent prosperity of their employers, we are at a loss to determine by what means this can be effected. Such interest is always necessary, on the part of the employee, to insure to the employer an equivalent for the amount paid for hired help.

Feeding Horses has been reduced to a most economical scale by the London Omnibus Company, who use no less than six thousand horses. Three thousand of the number have been fed bruised oats and cut hay and straw—the other three thousand, whole oats and hay. To the first named the allowance was, of bruised oats, 16 pounds; cut hay, 7½ pounds; cut straw, 2½ pounds. The latter were allowed—unbruised oats, 19 pounds; uncut hay, 13 pounds. Now for the result:

The advantage of bruised oats and cut hay over unbruised oats and uncut hay is estimated at 5 cents per day on each horse, amounting to $300 per day for the Company's 6,000 horses. It is by no means an unimportant result with which this experiment has supplied us. To the farmer, who expends a large sum in the support of horse power, there are two points this experiment clearly establishes, which in practice must be profitable; first, the saving of food to the amount of 6 pounds a day; and secondly, no loss of horse power arising from that saving.

Large Asparagus has been raised by D. K. Jones, of Long Island. The secret of his success was in that "the bed was arranged so that, as each stock came up, it had a tuft of horse manure on its head!"

Corn, in some parts of this city, is now beginning to head out.

Cabbage—promised in two weeks.