

enough after every shower, and again in five or six days, any way, if it does not rain, as the ground will then be settled so as to be a better conductor of moisture than when first stirred.

I have written so much on this point that more may seem unnecessary; but there are thousands yet who do not fully understand it, and this, as well as the shallow tillage, is a very important point to the ordinary grower of potatoes.

Farmers said to me last winter: "Why, stirring the soil makes it dry faster." Certainly, the inch or two that you stir dries faster; but after that it acts as a mulch, and greatly retards evaporation from the mass of soil, and wet soil below. You lose a little purposely to certainly save most of the rest.

A word about Breed's weeder: It is a perfect, light smoothing harrow. It cannot "track" as it is drawn by a horse walking between thills. But it is a tool to be used only on mellow land, free from stones and all rubbish, and for level culture. It does rapidly in the field just the work that you would do, in the garden with a steel-toothed rake, stirring the soil to prevent weed growth and to mellow the immediate surface.

My friend C. pays for picking up potatoes three cents a bushel. We are ahead, for it does not cost us more than half that. Labor is probably cheaper with him; but I think the difference lies in the way they are dug. He speaks of plowing out the potatoes. It is double work to pick up after any of the plow diggers that I have tried. The elevator diggers, like the Hoover, leave the tubers so clean and right together, on top of the ground, that a man working for a dollar a day and board would be ashamed to pick up less than 100 bushels for a day's work.

Our friend speaks of some growers using bushel boxes to pick up in, and others two-bushel burlap bags. He prefers the latter. We have the boxes for field use; think we can pick up faster, and they are more durable. But for putting potatoes on the cars, from the barn or cellar, the bags are much the best. An extra man can shovel the potatoes up into bags (one bushel in a bag) while my regular man and myself are gone to the depot, each with a load. Then when we get back, the two men can hand them to me as fast as I can load them, and in 20 minutes we are on the road again with 100 bushels or more. They can be loaded on the car very rapidly also, and there is little dead weight to draw back and forth. For this purpose we use hundreds of burlap sacks.

There are few jobs more unpleasant to the writer than sprouting potatoes. We like the Beauty of Hebron to eat; but they will sprout early, with ordinary care. The other morning my son and myself went down cellar, and one emptied the boxes of potatoes into a revolving cylinder while the other turned a crank, and we took the sprouts off of a bushel or two per minute, doing the work quite well. The sprouter is made by the Hoover digger manufacturers. Truly the world moves on! But we haven't got a machine to pick up potatoes yet.

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### SEASONABLE NOTES.

#### MANGEL WURZEL.

If we were asked to name a day upon which mangel wurzel might be sown with the best prospect of success, we should say, as we have said repeatedly, the 21st April. (1) It is, of course, impossible to fix dates accurately, as seasons differ in character, but, as a pivot by which to fix the most suitable period, the present may be taken as the best time for this purpose, and by the end of the week those who have not sown may expect to suffer by further delay. No doubt during the week now commencing the greater part of the mangel area

will be seeded. If our advice is valued by readers they may find it advisable to again look at remarks made under the heading "Seasonable Notes" for the two or three previous weeks.

Results obtained in certain quarters and reported last week were less favorable to the use of dung than our expressed opinions on this subject. The immense difference between the results of the two unmanured plots was in itself likely to shake the confidence of readers in the value of the experiments. How can we attach importance to an apparent increase of two or three tons per acre from the use of a manure, while there is quite as great or even a greater difference between two unmanured plots? Our own experience is contrary to the alleged superiority of superphosphate over dung as a manure for mangel, and it seems rather doubtful wisdom to raise questions as to the value of a manure such as dung, which is perfectly assured in its position. It would be by no means difficult to show by field experiments that superphosphate, nitrate of soda, and potash salts have acted injuriously by diminishing the yield of crops.

We have not space for examining the internal evidences which the experiments alluded to contain as to their invalidity as guides. It is, indeed, a question whether any field experiments can ever confirm, overturn, or modify the practice of good farmers, based upon long experience. If we are to this day to learn from experiments that dung is an uncertain, expensive, and ineffective manure, all we can say is, so much the worse for the teachers and the experiments upon which they rely. Soils and seasons are too various in character for generalising as to effects produced upon one soil in one season. We however, see very little symptom of insurrection against King Muck, or even of waning popularity.

One of the best reasons for using dung is overlooked or, in some cases denied—namely, its cheapness. Wherever cattle and sheep are kept at a profit, there dung is obtained for nothing as a bye-product. As cattle and sheep are now the only productions by which farmers can possibly live and pay their rents, it follows that farmyard dung and sheep droppings must increasingly be relied upon to keep up the fertility of the land. Where are the continuous wheat growers who were at one time going to revolutionise farming by pocket manures and corn every year? Who are prosperous among us? We answer: those who stick to their sheep and cattle, their dairies and young stock. Will anyone have the hardihood to dispute this?

J. WRIGHTSON.

#### MANURING MANGEL WURZEL.

Well-timed and admirably to the purpose are the articles on this important subject in recent issues of the GAZETTE, for they come to us just as we were in the full swing of preparations for sowing mangel, and they offer sound practical hints based upon the safe lines of actual results. Advice so given has much more weight than mere downright statements, however correct they may be, for everybody likes to know the reason why of a matter, and among farmers this feeling is so predominant that it not unfrequently tends to clog the wheels of progress.

No doubt deductions from experiments are useful, but they are certainly not to be regarded as conclusive. Take, for example those published by the Essex Agricultural Society in which the chief lesson taught by these trials "is the most unsatisfactory kind of manuring for mangels seems to be dung alone." As a general statement this is correct, but it must not be taken as a hard and fast rule of practice, for there are local circumstances always to be taken into account, or, in other words, every field of any farm must be treated according to its special condition and requirements. Let me give an example in my own practice. Last season I had a splen-

(1) In England. Here, May 10th.