

ROOTS FOR STOCK.

THE VALUE OF ROOTS, COMPARED WITH HAY.
—On this subject there are various opinions, and as root culture is comparatively recent in this country, we cannot make any estimate satisfactory to ourselves. Our opinion of to-day may be changed on further experience, observation, and by the opinions and experiments of observing farmers.

Some farmers say one ton of hay and one of roots are worth as much as two tons of hay; others say two tons of roots, others say three, and others four tons are equal to a ton of hay. Who shall decide? We cannot, among so many different opinions, get a medium between the wide extremes.

We will reckon two and a half tons of roots equal to a ton of hay for stock, though we think that when the quantity of roots is not large, compared with the hay, that the quantity of roots for a ton of hay is large; but in speaking favorable of root culture we would make safe calculations.

We will reckon 40 bushels of roots to the ton, (2000 pounds) which will be 50lbs. to the bushel. Most kinds of roots weigh more than this. We have weighed potatoes, and find that they weigh 64 or 65lbs. to the bushel. By a statute of Maine they must weigh 65lbs. to the bushel. Large sugar beets and heavy turnips will weigh over 60lbs. to the bushel. But small beets, turnips, carrots and parsnips, if the roots be very long, will weigh much less. As potatoes are round, or nearly so, a bushel of small ones will weigh a little more than large ones, as we have found by experiments. We think that for roots of different kinds and sizes, that the average weight will be about fifty pounds to the bushel.

THE VALUE OF ROOTS COMPARED WITH GRAIN.
—On this subject too, opinions are very different. A calculation suited to a medium between extremes would be four bushels of roots to one of corn—three, or three and a half bushels to one of barley—two to one of oats. We do not give this estimate with great confidence in its correctness; intelligent farmers differ much on either side.

THE PRODUCE OF ROOTS COMPARED WITH GRAIN AND HAY.—In the preceding number we stated that an acre of land that would produce 50 bushels of corn would produce 600 bushels of roots. The crop of roots being 12 bushels to one of corn, and four bushels of roots being equal to one of corn, the produce of an acre of roots would furnish three times the food for stock that would be furnished from an acre of corn, and the expense of raising would differ but little.

Besides the greater profit in getting three times as much food from roots, the roots will exhaust the soil much less than grain, and there will be the double advantage of improving the farm, by less exhaustion, and having three times the manure to apply to the soil.

A ton and a half of hay per acre is probably as large a crop as 600 bushels of roots, and if one ton of hay be equal to two and a half tons, or 100 bushels of roots, then the produce of an acre of roots is four times as much as it in hay: of course the root crop would produce four times as much manure to enrich the land, while the crop is no more exhausting than that of hay.

If root cultivation be entered into largely, farmers would not find it necessary to raise less hay as their stock would be greatly increased, and would be fed partially on hay, but the improved

condition of land consequent on roots, would produce the same amount of hay on less land. Nor would it be necessary for the farmer to raise less grain, excepting for stock, for his land would gradually become richer and more productive, so that he could raise as much grain and hay as usual, and yet raise large quantities of roots without cultivating any more land. All kinds of crops might be doubled, or including roots there might be raised twice the amount of produce from the same farm; and twice as much stock could be kept, and in better condition too, then of course there would be double the quantity of manure to apply to the soil annually.

If twice the amount of produce could be obtained, as it would not require twice as much labour, and in some cases but little more, then of course the farm would afford more than twice the profit—in some cases three times the profit. For if a farm can be worked for \$300, and it yields \$400 worth of produce, if the amount of produce can be doubled, and the labor performed at an additional expense of 50 per cent., which could be done; then the expense for labour would be \$450, and the value of produce be \$800, which would give more than three times the profit.

We are aware that these estimates, and the conclusions drawn from them, will appear incorrect and whimsical to those who have not attended to root culture, so as to appreciate its great importance to the farmer, but those farmers who have experience in this business will agree with us on its general and great advantages, though they may not agree in all the particulars in our estimates. Some would make calculations more favourably to root culture. We have endeavoured to get a medium between the wide extremes, as they are given by practical farmers; who from various circumstances form different opinions.

In conclusion we would say to every farmer, raise roots to stock; if not prepared to raise many, begin in a small way and raise a few hundred bushels, which can be obtained from half an acre of land, and then increase the quantity to thousands of bushels; and the consequence will be, fine pork, beef and mutton, an increase of stock, and a greater profit according to the number, more productive lands, until the value of your farm and your profits are doubled and trebled.

That this may be accomplished by a proper management without any outlay of capital, is evident from facts, numerous, plain and conclusive.

OIL FROM CORN FOR LAMPS.—There was placed upon our desk, night before last, a lamp with corn oil, manufactured in this county by Mr. William H. Watson, at a place known as Cold Water. It is a beautiful oil, of about the consistency of sperm, and burns with a clear steady light in every respect equal to sperm or lard oil, without the smoke which usually attends vegetable oils. We learn that the manufacturer will shortly be able to bleach it, which will make it more clear and white, and doubtless add to the purity and brilliancy of the light, and that it will not congeal in the coldest weather. It can be furnished seventy-five cents per gallon. As it is a new and valuable addition to our manufactures we trust it will receive the encouragement it merits.—*St. Louis Republican.*

SHEEP.—After being sheared, Sheep should be housed during cold nights and stormy weather.

For pigs, peas, &c. should be ground; for sheep, and all animals chewing the cud, this is not necessary.