

To compensate for this loss of the cream of their farms, wasted in cities, farmers must soon charge two or three prices for their wheat, corn, hay, potatoes, pork, beef, and mutton, or quit their occupation.

In the interior of an Atlantic State where this article is written, guano is selling at sixty dollars a ton, and soda-ash is used for agricultural purposes at a cost of one hundred dollars a ton. At these prices for fertilizers, corn should sell at a dollar a bushel, and wheat at two dollars; and to this complexion the agriculture of all the older States is fast tending. The price of commercial manure will ere long govern that of all the great staples of the country. The one thing needful in farming is the raw material of crops; for the solid bones of domestic animals, and of men, can not be formed of simple water, nor of carbon, or moonshine. Bread and meat can never be cheaply produced on poor land until their elements are properly understood, and husbanded by nearly all consumers. With cheap and rich manure at hand, most cultivators would undertake to grow grain and stock at very moderate prices. But good manure is high wherever arated land is unproductive, and it will be higher before it is lower, for it is wasted in all cities and most villages in the most reckless manner. It is also wasted on a large majority of farms to an extent equally injurious to the public. A general reform both in town and country must take place, before agriculture can rest on a safe, or an improving system. Necessity will ultimately compel Legislatures to pay more attention to the farming interest, and to the diffusion of rural knowledge, than has yet been done.

ROOTS AND THEIR CULTURE.

Of the importance of a good supply of roots for the winter feed of cows and sheep, it is unnecessary at the present time to speak.

All good farmers will take suitable measures to provide liberally for their stock, the different varieties of food which are most conducive to thrift, and profit in feeding. At the prices hay and grain have borne the past season, fattening stock on them exclusively, has been, or would be, a losing business, so far as regards the matter of dollars and cents; but if the fattening of neat stock is mostly done by means of roots, and a little grain fed before the time of selling for the shambles, then in most cases, the reverse is true, and the manure left by fattening animals is so much additional gain.

It is necessary, also, to secure a variety of roots, as well as a sufficient quantity. The appetite of man and beast is cloyed with any one particular kind of

aliment, and a change of food is indispensably necessary to secure the greatest possible benefit.

What kinds of roots should a farmer cultivate? Carrots, and sugar beets are an excellent food for milch cows; mangel wurtzels and ruta bagas for stock feeding generally. Carrots require to be sown in a light, deeply-tilled, loamy soil, and if it has been well manured the previous year for a crop of Indian corn, it is all the better. If manure is used to prepare the ground, let it be as well decomposed as may be, and thoroughly incorporate it with the soil by the roller and light harrow.

Be sure your seed is of the previous season's growth, if you would have a good stand of plants. You will want about two pounds per acre; sow in drills 16 inches apart, at a depth of about half an inch. As carrots are usually a long time in appearing above the surface, weeds have time to get the start if your ground and manure be not especially free from their seeds. To avoid this difficulty, the French translator of VON THAIR'S principles of agriculture, says: "I am in the habit of spreading the seed after it has been rubbed between the hands, on a table in a warm place, but protected from the direct rays of the sun. It is then constantly covered with stable drainings for eight or ten days, in order that it may germinate as soon as put into the ground. To prevent the upper portion of the seed thus spread out from drying too quickly, and becoming deteriorated, instead of improved, I cover it with a small quantity of ashes, by which means the moisture is more completely retained. I also take care to keep the seed constantly moistened up to the time when it is put into the ground, and then quickly cover it up."

We have ourselves at times been much annoyed at the failure of seed to germinate; and the seedsmen who will mix 40 per cent. of old carrot seed with new, is really doing the cause of agriculture a great injury. What can be more provoking than after having taken pains to prepare ground, sow the seed, and find your labor and pains all of no account, by reason of bad seed? An excellent way to test seeds of all kinds is to put them between the earth sides of two sods, moisten with water, and in the course of a few days you can easily determine their worth. As soon as they can be perceived above the grounds, commence weeding. A few days delay may add one hundred per cent. to the labor. When fairly up, thin to the distance of four or six inches according to the variety used; and if your ground is in proper tilth and condition, you will have but little more to do until the time for gathering.