

that plant has found its way down to the sub-soil, and has come in contact with the cold and not disintegrated portions, that the termini of that root will turn brown, become sickly, and the plant will cease to tiller. It is for this reason that shallow plowed meadows run out, and it is for this reason also that sub-soiled meadows never run out. Let those who doubt this fact look at the grass growing over an old post-hole that may have become accidentally filled up. Plants will continue to tiller in such a situation, long after the average surface of the meadow has ceased to replace itself.

We should also be sure that the right amendments are added to the soil. We should know that the leading constituents of our crops, particularly those of an inorganic kind, are present in sufficient quantities, and if they are not, they should be added before putting down a crop intended to occupy the soil for many years.—*Working Farmer*.

#### TIME FOR CUTTING BUCKWHEAT.

It is hard to give a precise rule for the best time to cut buckwheat. The grain continues to ripen successively, and while most of the stalks remain green or succulent, these grains will not drop off. It is therefore best to let the crop remain as long as the amount continues to increase by successively ripening portions. But as soon as the plant loses its fresh appearance, and the first ripened portions are found to separate easily, no time should be lost in cutting. The rule with some farmers in the north, is to allow the crop to stand till the first light frost, and then cut as quickly as possible, before the shelling process commences. But when frosts do not come early, it is cut before. As soon as the stalks are dead or dry, buckwheat threshes with great ease, but not before; hence the reason that when but partly dried, it is often found so difficult to thresh. At the north, it is usually sown during the early part of summer, sometimes nearly as late as midsummer; if sown too early, the grain does not set well.—*Country Gentleman*.

#### THE "ECONOMICAL MANURE."

For some time past there has been used to some extent in England and Scotland, an artificial manure, to which the above title has been given. If testimonials are to be relied upon at all, this manure *must* be possessed of very desirable properties. In the month of May last it was analyzed by a competent chemist in Edinburgh, and found to be composed *mainly* of, 1st. proto-sulphate of iron, or green vitriol, about 35 per cent; 2d. of sulphate of lime, or gypsum, about 16 or 17 per cent; and 3d. of chloride of sodium and other alkaline salts, about 26 to 34 per cent. In one specimen analyzed the chloride of sodium amounted to 16.31 and the other alkaline salts to 10.66, or in all 25.97 per cent, and in another specimen to 17.43 and 16.88 respectively, or in all to 34.31 per cent.

Now, as a manure of such a composition might be easily and cheaply got up by any agriculturist, we subjoin a specimen or two of the testimonials which have been given of its fertilizing properties. One testifies that on that portion of a field of barley on which this manure was sown broadest, mixed with ashes, the growth of the barley was wonderfully thick and luxuriant to what it was on the other portion of the field. Another testifies to its having most beneficial effects on his garden crops, and to his cattle being very partial to a part of a field of grass to which it had been applied. "Your manure," says Mr. John Davenport of Staffordshire, "improved the wheat very much, and the grass it sweetened, and the cows eat it off very bare all the summer." "Your manure," says one, "was sown with clover, and it is most luxuriant."

It is called the "economical manure," because  $\frac{1}{2}$  to  $\frac{1}{2}$  cwt., per acre fully equals in effect 3 cwt., of the best Peruvian guano, and because the saving in cost is thus at least 50 per cent. It is applied with two or more times its bulk of light earth or peat-mud, or ashes or sawdust or anything of that kind, broadcast. It has been also employed in solution. In this state we presume it was applied to some apple and pear trees, of which it is said to have improved both the foliage and the fruit. We may close by stating that it is sold in Great Britain at about or a little over the price of the best Peruvian guano, that is about £12 per ton.—*Country Gentleman*.

#### NIGHT-SOIL, ETC.

We commend attention to this subject, and invite our readers to notice the following from the volume recently published by Prof. Nash:—

In European countries, as also in some of our cities, this has been wrought by various processes into a dry, portable, inoffensive, but very powerful manure, under the name of *poudrette*. This is one of the forms in which the fertilising agents of the city are returned to the country, whence they came.

On the farm the night-soil may be put to good use in a less troublesome way. After being carried off in the spring—or better, in the latter part of winter, while it is yet cool—the bottom of the vault should be covered, at least a foot in depth, with fine black peat or mud, previously prepared and dried for the purpose. A little of the same should be thrown down daily through the summer, and once a week or fortnight during the winter. If plaster be occasionally added, it will be well, though this is not essential. The peat itself will be sufficiently *deodorizing*, if put down in such quantities as to be kept fairly moist and no more. It will withhold all foul odor. It is well to have an opening in the rear of the building, and a pile of prepared peat lying near, that it may be thrown down without much trouble, lest it be neglected. Good farming requires daily attention to many little things, and unless a previous preparation for them be made, these little things, important in the aggregate, are apt