

must be reduced to either a liquid or gaseous form before it is in proper condition to be appropriated; hence the more finely it is pulverized and the more thoroughly incorporated with the soil, the nearer ready for immediate use, other conditions being equal. I am satisfied that farmers often lose heavily by not having all manure in a good state of preparation for the growing crops. It should be in such a condition that it is readily available, and at such times as the plants most need it.—*J. M. Smith, in The Tribune.*

PLANT TREES ON THE FARM.

There is a great scarcity of shade trees on many farms, and it would be a good thing for the coming generation if an "arbor day" could be set apart, as it is in Michigan, when every man and boy should feel it his pleasure and duty to plant one or more trees. Some States are so alive to this necessity that a reward is offered to the one who will plant the greatest number of forest trees on that day. If towns and villages would interest themselves in this matter, in twenty years there would be a great difference in the appearance of their lawns, streets, and farms.

In the forests still left untouched by the woodman's axe there are plenty of young maples, oaks, and elms, that the owners would willingly give to those who would set them out. After they have become well started, they ask no further care, and in twenty years will give you full return for your labour.—*The Cultivator.*

DEPTH FOR PLANTING CORN.

Professor Lazenby gives in his report as Director of the Ohio Experiment Station, the results of an interesting experiment on this question, in which corn planted on the 2nd of June, at the depths of two and three inches, yielded nearly forty per cent. more grain than that planted one inch deep, and twenty-six per cent. more than that planted four inches deep. It is probable that, if the planting had been done earlier in the season, the very shallow planting would have shown less disadvantage, and the very deep planting more; but the experiment forcibly shows how much may be lost through a little error in management.

In this experiment, the one-inch planting made but 75 per cent. of a stand, while the two-inch planting made 100 per cent., and the three and four inch 90 per cent., thus showing the risk of shallow planting late in the season.

COMMERCIAL FERTILIZERS.

The question whether or not it pays to buy commercial fertilizers is one that many farmers are considering at this season of the year. In the first place, it does not pay to buy them unless you know what your soil needs, and how they should be applied. To buy without knowing what you buy, and to apply it indiscriminately, is not wise. Some farmers purchase a quantity of concentrated fertilizer and sow it in a deep furrow, and so lose much benefit which would be derived therefrom if sown broadcast and near the surface. It does not pay to buy it and let good stable manure go to waste. Use your farm-yard fertilizers first, then buy commercial fertilizers to supplement and fill out, if you wish. A neighbour of mine has a farm-yard situated above the roadway, and every rain that comes washes out into the road great quantities of liquid manure, which ought to be absorbed by throwing straw into the yard, or composting it with muck or course manure. It would not pay this man to buy commercial fertilizer, at \$50 a ton, and let this go to waste. To sum up, we believe it pays a good farmer to

apply potash, ammonia, and phosphoric acid to his land if he knows it needs it, and this can be best ascertained by experimenting on small plots in different fields. It is an important question to decide upon.

FERTILIZING VALUE OF THE SOD.

According to experiments and analysis made in Germany to determine the number of pounds of roots and stubble contained in an acre of clover sod, to the depth of ten inches, it is shown that there were 8,921 pounds, which contained 191 pounds of nitrogen, besides considerable potash and phosphoric acid. Undoubtedly, the acre of sod which contained roots enough to afford such a large amount of nitrogen, was produced on land in a high state of cultivation, but suppose that an acre of sod contained only one-half as much nitrogen, or ninety-five pounds. How could a farmer supply an equal amount of fertilizers to his soil so cheaply and so easily as by clover raising? The clover root is rich in nitrogen, a fertilizer which is the most costly of any element of plant food offered in the market—say from \$20 to \$35 an acre. It is just the fertilizer needed for the growth of wheat and corn. A crop of wheat, yielding twenty-five bushels of grain, is said to contain, in the stem and grain, about sixty pounds of nitrogen, or only about one-third the amount found to be contained in an acre of good clover sod in Germany, furnishing the best evidence that a clover sod is an excellent preparation of the land for a wheat crop.

SALT NECESSARY.

If horses, cattle, and sheep could have salt for them to lick or nibble at all times as they desired, while in stable, yard, or pasture, they would escape various diseases and be more thrifty and useful than when deprived of it, or even given irregularly. Swine and poultry are better for having a little pure brine mixed up with their food. Since we have made this a regular practice, we have never lost an animal from disease of any kind, and only a few fowls, and these latter would not have become sick, had they not unfortunately got at an uncovered sink-hole, where they picked out bits of decomposing bread and vegetables, a small quantity of which had got there from the dish-water. The rock salt that comes in large lumps, and may be bought at low rates by the ton, is excellent for live stock. Boxes for this salt may be arranged by the sides of the mangers and in the pasture. They will need filling at distant intervals.

SATURDAY NIGHT.

The whole length of the busy working week lies between crisp, bustling, important Monday morning, and weary, hurried and hurrying Saturday night. How different is the one from the other. Saturday night is devoted to odds and ends. There are last stitches to be taken, errands to be done, rips to be repaired, and little things to be thought of, that the day of rest may find us ready.

I like the old custom that treats Saturday evening as the vestibule to Sabbath. I do not think the Sabbath is ever so dear and so sacredly helpful when we awaken to its blessed opportunities jaded and unfreshed because we have toiled too long and too late on Saturday.

Nor do I think that an evening of social gaiety is the most fitting preparation for Sabbath. Quietly, reverently, in pleasant converse with the household, or with friends, or over the Bible and the Sabbath-school lesson, let the closing hours of the week glide away till the curtain of sleep falls over the eyes.

HINTS FOR THE HOUSEHOLD.

FASHION item: Pumpkins may be dressed in a sheet, after scooping out the inside, cutting the outlines of a human face in the rind, and putting a candle therein. The effect is very pleasing.—*Exchange.*

GRAVY, which is excellent with boiled fish or with pork steak, is made by browning a sliced onion in a little butter, and adding a little at a time to some beef stock; thicken with flour rubbed smoothed in a little of the cold stock. Add, if you have it, some chopped parsley or Worcestershire sauce. If served with pork, a tablespoonful of tomato catsup is good. Salt and pepper to taste.

A **PLAIN** pincushion of silk, satin or silesia can be kept fresh by having two extra covers to pin over it; for from twelve to twenty-five cents very pretty lace mats can be bought, and they may be put on diagonally, so that the covers of the cushion will show (if of silk or satin), or be put on the usual way. The holes made by the pins in a handsome cushion, and which, after a little while spoil its good looks, are hidden by these lace covers. When one cover is soiled put the other on.—*N.Y. Post.*

With the greatest care the housewife will occasionally spill a little grease on the kitchen floor. When possible, the best thing is immediately to pour over it cold water, to cool the grease and prevent it penetrating the wood. Scrape off all that is possible, rub thickly with soap, and wash off with boiling water. When dry fold three thicknesses of brown wrapping paper, lay over the spot, and place on it a hot smoothing iron; this will draw much of the grease into the paper; then wash again with soap and hot water. This will take out so much of the spot that it will hardly be noticed if daily washed off as it draws out of the wood, for every particle has to come out at the top of the boards, and the more persistently one works at it, the sooner it will disappear.—*Gussie Thomas, in Country Gentleman.*

HOUSEKEEPERS make a great mistake, when they allow their vegetables to be washed at all, until just ready to be put on to cook. Many leave all kinds of vegetables to stand, covered with cold water, for a long time after washing, and by so doing lose a large portion of the natural sweetness and flavour. Many grocers think they cannot sell their vegetables, unless they wash them free from the earth that is on them when dug up, or they insist on the farmer's washing them before they will buy. To make them look fresh and handsome, they sacrifice a large portion of the best part of the root. If farmers should wash their potatoes, carrots, etc., after digging them, before putting them into the cellar, they would be spoiled in a month. The earth about them is absorbent, and a preservative of the less volatile elements of the root, which evaporate quickly after being washed. How often city people speak of the excellent flavour of the vegetables they sometimes eat in country homes; and wonder why they cannot be cooked to taste as well in the city. It is not because the farmer's wife understands the art of cooking vegetables any better than the city dame, but because she leaves the vegetables in the earth that covers them, until she needs to put them on to cook. House-keepers only can cure this evil. The moment the grocer finds that he loses his time and labour, when he washes his vegetables—just for the fancy looks of the thing—and that the house-keepers are becoming sensible, and will not buy them in their fancy dress, but in their natural covering, then city folks can have as nice vegetables on their tables as the farmer is favoured with; certainly they can do so, after the season is too far advanced to gather vegetables fresh every day.