

# FARM



## MISCELLANY

### The Peanut Increasing in Popularity.

The peanut is increasing in popularity as a stock food. To those that pay five cents a bag for the nuts it may seem strange that anyone should think of growing them in sufficient quantities and cheaply enough to make it profitable to feed them to hogs. Yet the peanut that is fed to the hog is not the roasted nut that has been carefully prepared for human consumption. We would not think of feeding peanuts prepared for human food to hogs any more than we would think of feeding rolled oats to horses or other farm animals.

The peanut plant is a legume and so takes nitrogen from the air and increases the amount of that element in the soil. The land best suited to the peanut is a loose friable soil with enough tenacity to hold fertility. The land should be well drained, that water may not stand on it. It is not advised to use barnyard manure except in small quantities. This would give the plants too much nitrogen. The chief elements of food needed are potassium and phosphorus.

A limy soil is not desirable, and an application of lime is likely to make many of the nuts unsalable. The color of the nuts is largely affected by the color of the soil. The dark soils give dark colored nuts and light soils light colored nuts. But for feeding purposes the vines and nuts grown on either colored soil is alike.

The planting of peanuts is done early in the spring after all danger of frost is passed. The rows are generally made about three feet apart and the nuts planted about two feet apart in the rows. When the nuts are to be used for pasturage or for forage the Spanish nuts are used, as the vines grow more upright. The same cultivation given corn does for the peanuts.

Harvesting is done by plowing along the rows, but not touching the vines or nuts. This loosens the roots and the vines with the nuts on them can then be pulled and stacked around posts, where they dry. A current of air should be able to pass among the roots to thoroughly dry them out.

### Hot Fitting of Horseshoes.

A bulletin of the Department of Agriculture says: Few farriers have either the time or the skill necessary to so adjust a cold shoe to the hoof that it will fit, as we say, "air-tight." Though the opponents of hot fitting draw a lurid picture of the direful consequences of applying a hot shoe to the hoof, it is only the abuse of the practice that is to be condemned. If a heavy shoe at a yellow heat be held tightly pressed against a hoof which has been pared too thin, till it embeds itself, serious damage may be done. But a shoe at a dark heat may be pressed against a properly dressed hoof long enough to scorch and thus indicate to the farrier the portions of horn that should be lowered, without appreciable injury to the hoof, and to the ultimate benefit of the animal.

The horse owner should insist on the nails being driven low. They should pierce the wall not above an inch and five-eighths above the shoe. A nail penetrating the white line and emerging low on the wall destroys the least possible amount of horn, has a wide and strong clinch, rather than a narrow one which would be formed near the point of the nail, and furthermore has the strongest possible hold on the wall, because its clinch is pulling more nearly at a right angle to the grain (horn tubes) of the wall than if driven high. Finally, do not allow the rasp to touch the wall above the clinches.

# AGRICULTURE



### Locked Up Plant Fertility.

The problem of rendering his poor soil more productive, and his good soil still better, is one in which every farmer of to-day is interested. We venture the statement that of all the "run down" or abandoned farms in the United States there is not one which could not be made productive again if proper methods of handling the soil were employed.

The failure of land to yield a crop is not due in most cases to a lack of plant food in the soil. Results of chemical analyses show that in average soils throughout the country there is in the first eight inches enough nitrogen to last 90 years, enough phosphoric acid to last 500 years, and enough potash to last 1,000 years. Why, then, if the soil contains such stores of plant food, does it fail to support crops? Simply because these elements are locked up in such chemical combination that the plants are unable to utilize them.

The great problem, then, of modern agriculture is not entirely the conservation of plant food in the soil, but rather the unlocking of the rich stores already in the soil, and placing them in a condition to be assimilated by plants. This unlocking process is carried on naturally by the soil microorganisms.

Plants, from the mightiest forest tree to the tiniest blade of grass, consist of a complex combination of microscopic cells, each cell containing protoplasm. This protoplasm is continually changing, taking up food which is brought to it in the sap, and casting off its waste products in much the same manner as the protoplasm in the animal body.

Bacteria are also plants consisting, however, of but a single cell filled with protoplasm, which, like that of the higher plants, is continually active in assimilating from the surrounding medium the food elements necessary for its maintenance. These myriads of little plants, invisible to the naked eye, in taking their food from the chemical compounds of the soil, produce in those compounds just the changes necessary to render them useful to the higher plants in making their growth.

In order that bacterial activity may go on with undiminished vigor, there are certain conditions of the soil which must be provided, certain requirements of the bacteria which must be complied with, namely, temperature, moisture, reaction, respiration and food supply.—S. F. Edwards.

### The Ground is Frozen.

The ground is frozen and the poultry can get no grit. This fact should be remembered by every man that has poultry. It is a fact that is often never thought of, with the result that the fowls fall sick from inability to masticate their food. We use the word advisedly. The human being chews food with the teeth to reduce it to a condition where the juices of the digestive apparatus can work on it. The fowl has to have grit for this same kind of grinding.

Grit wears out. It is different from teeth in this. Teeth renew themselves to a certain extent and the part that is being worn away is also being replaced. The grit in the gizzard of the fowl is all the time rapidly wearing out and must be frequently renewed. If your hens have been for a long time without grit, give them a painful and see what they think of it.

The pruning of the grape vines should be attended to as soon as possible while they are dormant. Some growers do the pruning in the fall as soon as the leaves have fallen. If left till late in the winter, the sap may begin to move before the pruning is done.

# HORTICULTURE



### The Keiffer Pear a Favorite.

As the Keiffer pear appears on the market it is not a general favorite, as it has not been properly ripened. It needs to be picked when fully mature and then put away for five or six weeks to ripen. When so treated it had a fair flavor, though the Keiffer will never be noted for fine flavor, no matter how perfectly handled. But taking all things together, the Keiffer is a favorite with pear growers. This is because it can be depended on to live and produce fruit, which cannot be said of most of the varieties of pears. The men that planted Keiffer pear trees a generation ago are now getting an income from them, while those that planted mostly other sorts are lamenting the fact that they planted varieties that yielded to the blight. Perhaps it is the lack of high quality in the Keiffer that protects it. It may be that the bees do not visit the blossoms of the Keiffers as much as they do the varieties that have more flavor to their credit. The fact is well established that the Keiffers do not blight as badly as some of the pears that are of fine quality. Now, the grower would like to have a pear of high quality to sell to his friends, but since he cannot he is fairly well satisfied to have a pear that his friends find edible and that he can produce in large quantities. The Keiffer pear is probably the one on which most money is made, at least east of the Rocky Mountains.

### Soils for Plum Trees.

The old notion used to be that plums preferred a heavy clay soil. This is still true for certain classes of plums, particularly the Domesticas and Damsons. But some other plums thrive in other soils, so that by choosing the varieties best adapted to particular situations plums may be grown almost anywhere. Even light, sandy soils are suitable to the Japanese varieties and some of the hybrids. Taking all kinds of plums together, however, the best soil is that which would be suitable for apples; and the general rule regarding apples is that they will thrive on any soil well suited to potatoes. A loose, deep, gravelly soil, with an open subsoil is the best for all orchard trees in this climate. This is what should be chosen where it is available. Where it cannot be had, almost any soil will do, providing only that it is well drained. It must not hold water either in summer or winter. If it is inclined to do so it must be thoroughly drained, preferably by closed stone or tile underdrains, before the trees are planted.—Prof. F. A. Waugh.

### Trees and Real Estate.

Why does not the absent owner of a farm plant a few trees on that farm every year to improve his property? The city owner of real estate has long ago found out that it pays to plant trees and so in the great tracts of land laid out into streets in the vicinity of the great cities we see all kinds of trees planted and cared for. On all sides of Chicago this is to be seen. The trees have been potent factors in drawing people to the suburbs to live. No one cares to go to a section where houses stand upon the open plain. But if there are thrifty trees it is different. The same tendency is as true of the farm as of the town residence.

The spreading of manure in the winter as it is made is now accepted as the ideal way of handling manure. It may be a little trouble to haul a load to the field every day, but some find this easier than any other method of taking care of it. It saves work in the spring, when all are busy.

The value of spraying is being appreciated more and more every year.

# POULTRY

### Cleanliness and Health.

In the summer time the poultry keeper is not called upon to do much cleaning in the poultry house, as, for the most part of the season, the fowls have the run of the farm. In the winter, however, the farm flock is shut up and its health can easily suffer on account of neglect to keep the house clean.

It is very natural to think that the cold weather will freeze the droppings as fast as they accumulate, and that, if they do pile up under the roosts, it will make little difference. The truth is that in much of the north there are very many days in winter when the temperature is above the freezing point and sometimes it is as high as fifty and sixty degrees. A warm night in winter is very trying on the fowls, when the droppings have been permitted to accumulate for a month, as is the case in numerous instances.

The writer has sometimes put his head into a poultry house in winter where the ammonia was so thick that it was a wonder the fowls could live in it. If it is bad for the owner to stay for five minutes in such a place, what must be the experience of the hens compelled to stay all night in it! The farmer is unable to figure out any loss, nor can anyone else. It comes in a weakened constitution; and some day when some fowl is found dead under the roost it will be indirectly due to the sapping of the constitution by the ammoniacal gases.

In every walk of life cleanliness and health are associated. The supplying of oxygen to the blood through the lungs is as necessary with fowls as with humans.

### Money from Feed.

One man feeds hens at a cost of 75 cents per year and another man feeds hens at a cost of \$1.00 per year. The man that saves 25 cents per hen may think that he is making money by his economy. Very often this will prove not to be the case. The man that has taken the trouble to feed his fowls on a mixed ration with considerable meat and ground bone, ground oats and a variety of grains and other forms of nitrogenous feed is not able to get the cost of the ration under a dollar a year.

The man that feeds his fowls at a cost of 75 cents per year will be found to be feeding a very large amount of corn. Now for the results. The man that feeds the more expensive ration is generally getting eggs all through the winter and is selling them at thirty-five or forty cents a dozen. The other man is getting no eggs till the winter begins to melt into spring and then has to sell them at 15 and 20 cents per dozen. The man that feeds the more expensive ration makes money, and the other man does not.

It is not a question of which ration is cheaper. The real question is how to make the feed pay for its cost and a margin of difference, which we call profit. The hen is but a machine to take the feed we raise or buy and change it into a product that is worth more than the raw product.

### The Lay of the China Egg.

A horrid old hen that ate all the eggs,

Had a terrible appetite, blast her—  
It wasn't the hen with the yellow legs  
That laid so well for her master.

She whacked at the china egg, peg-  
gety peg,

'Twas the hardest she ever had  
lilt on;

Said she, with a smile, "If I can't  
eat this egg,

I'll save it and keep it to sit on."  
—Exchange.