

MAKE FARM CHORES EASY

Where Possible, Every Farmer Should Use Time And Labor-saving Conveniences.

By S. I. Parker.

In the work about the farm it is at times necessary to have an easy way of transferring water, swill, or any other liquid to different parts of the farm; and as it is impossible to use horses and wagon for this work each time, much labor may be avoided by the construction of the handy water-barrel-carrier illustrated and described in this article.



The cost of same should be very slight as on every farm there is usually an old pair of wheels with an axle, and the wood frame work can be built in a few moments; this with a barrel and a little blacksmithing completes the carrier ready to help lighten your labor and save you many a step.

To construct, have the axle bent into a half circle as shown in the illustration, near to the hub have a short block about two inches thick, fitted so that it will rest upon the top of axle, to elevate the handles so the barrel will swing.

Make your handles of two-inch-square lumber in the manner shown in the illustration, or like an ordinary push-cart handle. Now have two iron 3 inches long and about one inch wide; have one end of each one bent up at right angles to make a hook which is to hold the barrel in place.

These must be drilled with two holes about as far apart as the axle is

wide, and then placed on the end of the handle over the block fitted to the axle, then two holes are bored down through the end of the handle and block.

Into these holes a clip or hook is fitted so that it goes around the axle and up through the block, handle, and iron hook on top, where it is drawn tight with nuts so that the whole framework is rigid.

Procure a good oil or molasses barrel and have two lugs made in an "L" form with the part that fits against the barrel flat, with two holes in same for bolting to side of the barrel and with the projection round, as illustrated.

This is the hanger that the barrel swings upon and is placed a little above the center of the barrel toward the top about two inches is ample. This will prevent the barrel tipping over when in the carrier or sling, and gives it a better balance.

To use, have the barrel set upright in the usual manner, fill with water or other liquid, then roll up the carrier and elevate the handles, which lowers the hooks at axle end, these are hooked over the lugs on barrel with the sides of the barrel up even against the semi-circular axle. You have only to press down the handles to raise the barrel from the ground and transport to any place you desire upon the farm.

The bent axle prevents the barrel from tipping over and also holds it firmly so that it will not swing on the lugs and thus make it harder to control when carrying. It also keeps the barrel from leaving its position on the hooks bolted to the ends of the handles and serves as a fulcrum for the handles to work upon, as levers when lifting the barrel when filled.

TO INTRODUCE A BEE QUEEN.

I use Pott's queen-cages, which can also be used as cell-protectors or nurseries. The difference between these and the regular Benton cages are:

1. The candy-hole is made from the end, using only a half-inch bit.
2. A half-inch hole is made through the side into the center compartment.
3. The top and side covers are of perforated metal, and cut so that they do not catch the clothing.
4. These covers are put on with a screw, which serves as a hinge, and can be tightened with one turn of the screwdriver, so that the imprisoned bees cannot force open the doors and escape, which I have seen them do when laid down temporarily.

The convenience and advantage of these cages will be readily seen in the following operations:

Go to your nucleus colony and pick up the comb with the queen, grasp it with the left hand, also hold your queen cage with the same hand, your thumb over the opened side door. Now with the right hand pick off your queen and she will easily pass through the half-inch door. A three-eighth or quarter inch is not nearly so convenient. You can cage as many bees as you wish, with seldom a sting. The covers are so cut that they will not catch the clothing and pull open on the way to the out-apiary.—Joseph Gray, Long Eaton, England.

NEED OF MUTUAL REASONABLENESS.

There should be no friction between farmers and motorists. Farmers should realize that the motor has come to stay, and adapt themselves to conditions. And the motorists traveling through the country should on their part show proper consideration for the farmers on the public roads with nervous, frightened horses. Most horses will pass a dead auto without trouble.

It is the height of folly for women and children to attempt to jump out of a carriage or buggy when a horse is frightened at the sight of an approaching auto, as this frightens the horse all the more.

The motorist should stop dead still until the horse and buggy get well past, and if the animal appears too restive he should get out of his car and lead the horse past the machine. With the exercise of this gentleness, caution and good sense on the part of all persons, horses will, in time, learn to pass a moving auto with as much unconcern as they now meet and pass other teams. This is one of the questions which will never be thoroughly settled until it is settled right.

Farmers should remember that the motorists have had more to do with awakening town people to the necessity of good country roads and highways than any other class of people. J. M. T. Missouri.

FERTILIZER FOR THE BERRIES.

A well-known gardener recommends the following in the culture of strawberries:

Tankage or Peruvian guano, 600 pounds per acre; fine ground bone, 1,000 pounds; low grade sulphate of potash, 600 pounds; nitrate of soda, 100 pounds.

All these materials may be mixed, applied after mowing and before setting plants and thoroughly incorporated in soil by harrowing.

Dried blood, 200 pounds per acre; low grade sulphate of potash, 600 pounds; tankage or Peruvian guano, 600 pounds; basic slag meal, 1,000 pounds; nitrate of soda, 100 pounds.

The slag is not mixed with the blood, tankage or guano, as it causes a loss of ammonia. It is better to apply the slag by itself, but all the other materials may be mixed before application.

MAKING MEDICINE FROM WEED SEEDS.

Many thousands of dollars worth of weeds are imported to this country every year to be used in making medicine. Wild mustard, burdock, jimson, dandelion and similar plants, which are regarded as nuisances by American farmers, are sold to our chemists in large quantities. A quarter of a million dollars was paid last year for 5,000,000 pounds of wild mustard.

PIGEON LORE.

We know two maiden ladies in New Jersey who spent \$400 for buildings, breeding birds and two years' time, and who gave up squab raising as a bad job.

LAYING DRAIN TILE REQUIRES SKILL AND JUDGMENT

By George W. Brown, Ohio.

The draining upon the farm if placed properly and the outlet well taken care of at all times, may be expected to last more than the ordinary life of man. We know it to be true in our own and in many other sections in which we are acquainted, that more than sixty per cent of all tile drains placed upon the farms are not laid in good condition, and are not doing the service they should.

We have, in the past ten years, done a very great amount of such work, much of it upon our own land, and we have at least learned much along this line of work that is worthy of discussion.

We have one drain of sixty rods that is not giving us the service it should, and with the opening of spring we shall take this drain up entirely, and replace it in better condition. The outlet is at fault being shallow in depth and does not take the water away rapidly, thus causing much sediment to collect in the tiles disabling their capacity.

Last season we helped a neighbor in just such a job, and in places these tiles were within one inch of being filled with solid earth washed into them from time to time. This drain

had been laid over twenty-five years and the tiles were just as good as new.

The bottom work is the main thing in getting a good ditch, and if we were not certain we could do a good job in this line we should not hesitate one minute to employ a man who is thoroughly experienced in this work.

When the proper grade is determined and bottom in shape, the tile is easily laid, but not every one can lay it properly.

We have at times worked with men who would tread over the tops of the tiles in laying them, stamping and pounding as though their life depended upon it, and in the end have a crooked, and uneven line of tiles, which it was doubtful whether water could ever find its way through.

The man that gets into the ditch, walking backward easily, and carefully laying each tile into place, fitting the ends well to each other, is the man who can be depended upon to get a good working drain.

Many make a mistake in laying tile with a chink broken out at one end, chink downward, thinking it is unnecessary to patch the hole. What will happen? A sly old crawfish starts

some day at the mouth of the drain, and crawling up into the drain finds this hole just where he wants it in the bottom of the drain. He sets to work to make a crawfish hole, piling up a mound of clay in the drain which makes an obstacle for sediment to catch upon and in a short time the drain becomes useless. Had the hole been patched with a larger piece of tile on top of the drain course this would not have occurred.

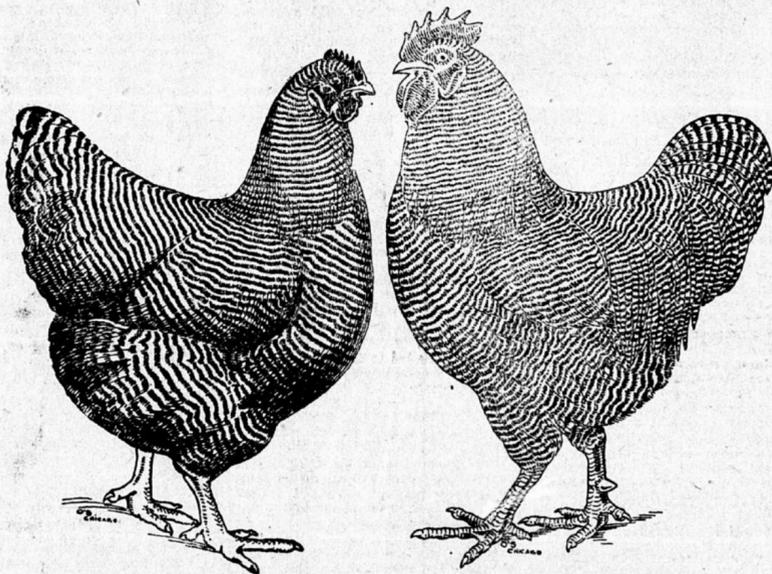
Much better still not to use these tiles if badly chinked.

When we come to a boulder, if it be not too large, we bring it to the top and haul away upon the stone boat. However, some are too large to bring to the top, so we dig behind them and somewhat deeper and roll them over with a good crowbar, thus getting them below plow depth, and out of the way of the drain.

We never lay a tile drain around a stump, root or boulder, but have the course as straight as possible.

A small flat stone fits nicely at the end of the drain when finished, keeps out trash and crawfish, and we always stick such flat pieces away in some nook in the fence as they are picked up over the fields in cultivating, then we have them on hand when needed.

AT THE PRESENT PRICE OF EGGS IT PAYS EVERY FARMER TO STUDY THE ADVANTAGES AFFORDED BY PURE-BRED POULTRY



SYMPTOMS OF HOG CHOLERA LACK OF CHARACTERISTIC SYMPTOMS MAKES IT POSSIBLE FOR THE DISEASE TO BECOME WELL STARTED BEFORE DETECTION

By M. Dorset, M. D., Bureau of Animal Industry.

The beginning of hog cholera in a herd is marked by the sickness of one or two hogs. There is nothing particularly characteristic in the symptoms displayed, and the presence of the disease may not be suspected until a week or two later, when other hogs are attacked. As the number of sick hogs increases the opportunities for the well animals to contract the disease are multiplied, and in a comparatively short time all hogs exposed to the contagion will be attacked.

The symptoms observed in particular cases will be influenced by the virulence of the germ which is responsible for the attack, and also by the resisting power of the hogs in the herd. If this resisting power is low, or if the germ which is the cause of a particular outbreak is of high virulence, we may have in such a herd a typical manifestation of the acute type of hog cholera. In this acute type, the chief symptoms observed are sluggishness, disinclination to move, weakness, loss of appetite, a high fever, inflammation of the eyes with summing of the lids, and there may be diarrhoea. If the sick animals are examined carefully, red or purplish blotches may be seen on the skin, especially over the surface of the abdomen, on the inside of the legs, and around the ears and neck. As a rule the progress of the infection is so rapid that the hog is not greatly emaciated before death; it is, in fact, usual in acute outbreaks for hogs to die after being sick only a few days.

In the chronic type of the disease the symptoms are quite similar to those seen in acute cases. The sick hogs are sluggish and disinclined to

move, and usually lose flesh rapidly, finally becoming so emaciated and weak that they stagger or walk with an uncertain gait, the hind legs particularly appearing to be very weak.

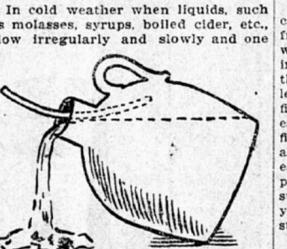
The eyes become inflamed and the lids may be gummed together. After the first few days of illness there is apt to be a profuse diarrhoea, and in these chronic cases the hog may, and usually does, linger for several weeks, sometimes months, before it finally dies. It is extremely rare for such an animal to recover its health and vigor sufficiently to become of value to the owner.

It will thus be seen that before death the appearance of hogs affected with hog cholera is not particularly characteristic, for the symptoms, especially in acute cases, are only such as might be expected in a severe disease of any kind. But if these symptoms are noticed in a herd of hogs, and if the disease is seen to be contagious, showing a tendency to spread from the sick to the healthy animals, it is likely that hog cholera is present, though in order to be sure of this a post-mortem examination must be made.

When corn stalks are given to hogs, care should be used to prevent cattle from having access to the woody fiber which the swine will leave after chewing the stalks. Pigs relish chewing the stalk for the sweetness in it, but leave enough saccharine matter in the fiber to make it attractive to cattle, especially the younger stock. This fiber is indigestible, and the cattle if allowed to pick it up, will frequently eat a sufficient quantity to cause impaction and harmful if not fatal results. It is not safe to let cattle into yards where swine are given corn stalks.

A feed of oats occasionally will be relished by the brood sow.

The easier a feed is digested the greater will be the gain from the feed.



Hog Sick With Hog Cholera (Chronic Type).
move when disturbed, and coughing is frequently heard when they are suddenly roused. They may eat very

JEWISH AGRICULTURAL COLONY.

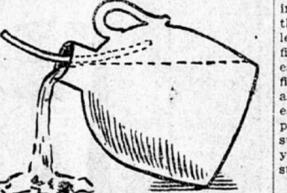
According to the Chicago Tribune, 35,000 acres of farm lands in Georgia have been purchased to be used in the Jewish agricultural movement inaugurated in 1880.

The purpose of this plan is to gather Jews dissatisfied with conditions in the larger cities and to furnish a wholesome agricultural life for those who care to take up such careers. This is the first definite step in procuring property for such colonies to begin operations upon. It is said those who are in charge of the financial end of the enterprise have made a thorough investigation of the best plans to pursue and this purchase is regarded as an almost immediate beginning of a colony.

Young hogs can be fattened more profitably than those that are older.

WHEN THE FLOW IS SLOW.

In cold weather when liquids, such as molasses, syrups, boiled cider, etc., flow irregularly and slowly and one



is in haste, insert a bent metal, rubber or glass tube in the receptacle above the liquid and half the time is needed to get the desired supply

SOY BEANS A FORAGE CROP

Best Adapted to the Cotton Belt, But Early Varieties May be Grown Much Farther North.

By C. V. Piper and H. T. Nielsen.

The soy bean is a native of southeastern Asia and has been extensively cultivated in Japan, China, and India since ancient times. Upward of 200 varieties are grown in these countries, practically every district of which has its own distinct varieties.

The beans are there grown almost entirely for human food, being prepared for consumption in many different ways. Their flavor, however, does not commend them to Caucasian appetites and thus far they have found but small favor as human food in either Europe or America.

As a forage crop, however, soy beans have become of increasing importance in parts of the United States, especially southward. They have been tested at most of the State Agricultural Experiment stations, and it is clear that their region of maximum importance will be south of the red clover area and in sections where alfalfa can not be grown successfully. They thus compete principally with cow peas, but as cultivation is usually required they fill a somewhat different agricultural need. Their culture has greatly increased in recent years, especially in Tennessee, North Carolina, Virginia, Maryland, Kentucky, and the southern parts of Illinois and Indiana. It seems certain that the crop will become one of great importance in the regions mentioned and probably over a much wider area. The earlier varieties mature even in Minnesota, Ontario, and Massachusetts.

The soy bean is especially adapted to the cotton belt and northward into the southern part of the corn belt. The early varieties mature in the northern part of the corn belt, but frequently do not make a sufficient yield to warrant growing them. Farther south, where the latter and larger varieties can be grown, the yield is sufficient to make their extensive cultivation very profitable. Generally speaking, the soy bean requires about the same temperature as corn. It is perhaps even better adapted to a warm climate and does not do well in a cool climate.

The soil requirements of soy beans are much the same as those of corn. They will make a satisfactory growth on poorer soil than corn, provided inoculation is present, but will not make nearly as good a growth on poor soil as cowpeas. Soy beans make their best development on fairly fertile loams or clays. The Mammoth variety also succeeds well on sandy soils.

On rich soils all varieties are apt to make a large plant growth and a comparatively small yield of seed, and on the poorer soils a small plant growth with a relatively large seed yield.

Soy beans do not require a well-drained soil for their best development although they will not grow in a soil where water stands for any considerable length of time. However, they are able to withstand a greater amount of moisture than either corn or cowpeas. In eastern North Carolina on the vegetable mold soils they make excellent crops. On this ac-



Typical Soy-Bean Plant.

count soy beans are especially valuable for growing in that region.

Soy beans are also decidedly drought resistant, much more so than cowpeas, and but for the depredations of rabbits would be a valuable crop in the semi-arid West. Rabbits are exceedingly fond of the foliage, and where they are numerous it is nearly useless to plant soy beans unless the field can be inclosed with rabbit-proof fencing.

RESPONDS TO CONNECTICUT METHODS.

A young farmer from Connecticut, the state where some people believe they raise nothing but wooden nutmegs, went out to Nebraska, the state that boasts of being the best corn state in the Union and picked off the first prize for corn and the Corn Belt farmers received a jolt from which they were long in recovering.

This young man has demonstrated what can be done on "worn out" soil by the use of fertilizers, good seed and high cultivation and what he has done can be done by any other man under similar conditions of climate and soil. He used 600 pounds of Commercial fertilizer to the acre, made a perfect seed bed, largest ridges seen, plowed his corn deeply the first time and cultivated it lightly thereafter. He kept the weeds down and the surface loose and dusty and the result was a crop of 133 measured bushels, shelled corn per acre.

In writing of this crop the enterprising young farmer says: "The ears will average about ten inches in length and seven and one-half inches in circumference, bearing an average of about twenty-two rows of kernels, with about fifty kernels in every row. The kernels are very deep, with a large germ, and chemical analysis shows them to be very high in protein and oil content. The cob is red and of medium size, and the ears well filled out from the tips to the butts. The variety is especially valuable as a feed crop, and is especially to be recommended for silage, as account of the field per acre of seed and stover, its quality and digestibility."

PROPER CARE OF THE COLT.

Some farmers try to get their colts through the winter as cheaply as possible, but this is not a profitable way as the colts will never be what they were if they had been properly cared for at the right time. The first winter determines largely the fate of the animal. A western stockman says: "When I get ready to wean, I shut the colt in a roomy box stall, with plenty of clean, warm straw for bedding, and there the colt stays until weaned."

"At first, I give the little fellow one quart of new milk (cow's), sweetened a little, morning and night; if a roan colt, three pints of crushed oats and bran, half and half; if a draft colt, two quarts of the same kind of feed at each feeding.

"As the colt becomes accustomed to eating grain and drinking milk, I increase the grain allowance and also the milk within 10 days to two quarts. I then add to the milk, one quart of warm water and a handful each of middlings and oilmeal.

"In about three weeks, I change from new sweet skim milk. I gradually increase the middlings and oilmeal until I have two or three handfuls of each.

After six or eight weeks of such feeding, the colt will be fat and sleek, then you can drop the milk and slop and feed a liberal allowance of crushed oats, bran and an ear of corn shelled in it now and then for variety and frequently a handful of oilmeal.

"I have had large, growthy draft colts at one year of age consume from two and one-half to three gallons of such food a day.

HELPS FOR THE FARMER'S WIFE.

There are women who in petty efforts to save, wear out their bodies, exhaust their energies and waste their time instead of remembering that there are great things waiting to be done, beautiful sights to be seen and helpful books to be read.

Inventions for making housework easy are daily multiplying, many of them so helpful and inexpensive that one often wonders that they were not purchased as soon as seen. Very often the self-denying housewife berates herself roundly for scripping along without a washed-for pan, egg-beater or some kitchen utensil when she realizes that it could be bought for a few cents.

Insufficient help in the kitchen is the rule rather than the exception on the average farm. Too often the housemother is allowed to undertake more than her strength will permit, hence we look into the tired and worn faces of a large majority of farmers' wives, faces from which all animation and interest in life has departed.

FEED MIXES FOR MILCH COWS.

Feed with hay and silage or with grain alone.

One.—125 pounds of bran, 100 pounds flour middlings, 100 pounds gluten feed. Mix and feed 6 to 8 pounds (7 quarts daily).

Two.—125 pounds of bran, 100 pounds of corn or hominy meal, 100 pounds cottonseed meal. Mix and feed 6 to 8 pounds (7 quarts daily).

Three.—75 pounds of bran, 150 pounds corn and cob meal, 100 pounds cottonseed meal 6 to 8 pounds or quarts daily.

Four.—200 pounds of distillers grains, 150 pounds flour middlings, 100 pounds gluten feed. Mix and feed 6 pounds (7 quarts daily).

Five.—75 pounds of malt sprouts, 75 pounds of wheat bran, 200 pounds gluten feed. Mix and feed 6 to 8 pounds (7 quarts daily).

Six.—200 pounds of dried brewer's grains, 100 pounds corn or hominy meal, 50 pounds cottonseed meal. Mix and fed 6 to 8 pounds (8 to 10 quarts).

Keep the pigeons' flying lofts clear of bolts as the birds are apt to injure themselves by flying against them.