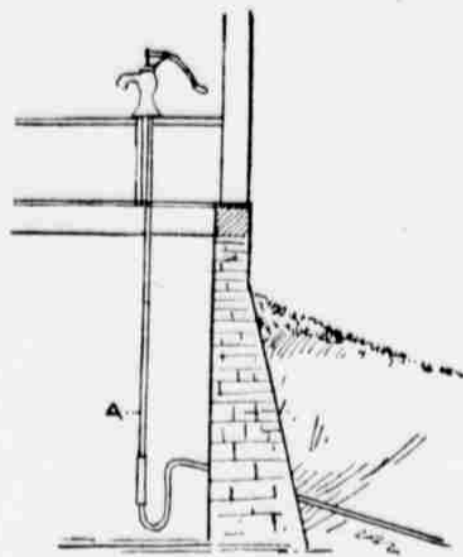


# THE FARMING WORLD.

## THE FARM KITCHEN.

### How Water May Be Pumped to It from a Distant Well.

It frequently happens that a farmer's family is obliged to depend for a water supply upon a well or spring at some distance from the house. When such a supply is on lower ground the labor of carrying water is considerable. This may be avoided by placing a pump in the kitchen, to discharge over the kitchen sink. Such an arrangement gives good satisfaction, while it is new, but a wearing of the valves, causing it to leak air, be it ever so little, will empty



WATER FOR THE KITCHEN.

the whole pipe of water, and the time and trouble required to "fetch the pump" will make the thing practically a failure. To overcome this a well pump must be used, bringing the cylinder near the bottom of the cellar. Then let the suction pipe turn upward, as shown in the illustration, and pass out through the cellar wall a little higher than the top of the cylinder. This will cause water always to remain in the pump and thus secure the pipe from becoming empty. With this arrangement water may be drawn under ground to where it is needed from a distance of ten or twenty rods without difficulty, except that it must be from a point not more than 25 feet lower than the pump cylinder. If the kitchen is subjected to freezing temperature in the winter the pump may be protected by making a small hole at "a," thus permitting the water to escape down to that point when the pump is not in use.—Charles E. Benton, in Practical Farmer.

## SAVE YOUR FIELDS.

### If You Do Not Feed Your Land It Will Refuse to Feed You.

"Why do you feed your horse?" If that question were asked the average farmer he would doubtless answer: "You are a fool; I feed him to keep him alive and able to work." But if the question were asked: "Why don't you feed your land?" the average farmer would not be so ready with his answer. Yet the one thing is no more important than the other. If it is absurd to be able to work and produce results having no material to be converted into strength, it is no less so to expect land to produce crops continuously without having new supplies of plant food with which to make them grow. No soil is inexhaustible.

While there are large accumulations of plant food in some localities, continuous cropping and the leaching and washing caused by rains will in time deplete and exhaust them. It is better to feed the land before it is starved. It is easier to keep a horse fat than to fatten a poor one; and it is easier to keep land productive than to take that which is dead poor and make it so. A horse that is still strong enough to assimilate his food can soon acquire his normal strength; he only wants a plenty of good food. Land that will grow crops of any leguminous plant will, if the same are plowed under or fed off in the field, in a short time recover enough tone to produce profitable crops of other things. But if allowed to run down so that neither clover nor peas will make a crop, it cannot be economically restored. A word to the wise is sufficient; begin this year to feed your land, so that it in turn may feed you.—Rural World.

## HINTS FOR BEEKEEPERS.

The Italians stick closely to the combs even when handled.

Do not keep a colony with a defective queen. Kill her and give them a good one.

Wherever a farmer, dairyman or horticulturist can make a living a bee man can also.

One advantage with bees is that during the greater part of the year their feed costs nothing.

There are three classes of bees in a thrifty colony, nurse bees, wax workers and honey gatherers.

Always have extra hives to save every swarm that comes out; often a little delay will lose them.

Give the bees plenty of working room if you want to prevent small swarms from coming out.

Never leave a newly hived swarm near the place where it clustered. The safest plan is to remove it at once to a stand somewhat distant whether the bees are all in or not.—St. Louis Republic.

## FEEDING FOR EGGS.

### Why Green Bones Should Be Used Much More Extensively.

The profit is always sure when every detail is correct. Cheap food must not be estimated by the price paid for it in the market. The cheapest food for the poultryman or farmer is that which gives him the largest number of eggs. It matters not what the food costs, so long as the eggs correspond. It is the product by which we should measure and estimate.

Green bones are not used as extensively as they should be, because grain can be obtained with less difficulty and at a low cost, but as egg-producing material the bone is far superior to grain; nor does the bone really cost more than grain in some sections. The cutting of the bone into available sizes is now rendered an easy matter, as the bone cutter is within the reach of all. Bones fresh from the butcher have more or less adhering, and the more of such meat the better, as it will cost no more per pound than the bone, while the combination of both meat and bone is almost a perfect food from which to produce eggs.

If the farmer can get two extra eggs per week from each hen in winter, he will make a large profit. We may add that if the product of each hen can be increased one egg per week only in winter, that one egg will pay for all the food she can possibly consume, and it therefore pays to feed the substances that will induce the hens to lay. If the hens are consuming food and yet are producing no eggs, they will cause a loss to their owner; and this happens every winter on a large number of farms. The hens receive plenty of food, but not of the proper kind.

A pound of cut green bone is sufficient for 16 hens one day, which means that one cent will pay for the bone for that number of fowls. If one quart of grain be fed at night to 16 hens, and one pound of bone in the morning, it should be ample for each day in winter. In summer only the bone need be given. Such a diet provides fat, starch, nitrogen, phosphates, lime and all the substances required to enable the hens to lay eggs. As an egg is worth about three cents in winter, it is plain that it is cheaper to feed bone than grain, as the greater number of eggs not only reduces the total cost, but increases the profit as well.

The bone-cutter is as necessary to the poultryman as his feed mill. It enables him to use an excellent and cheap food, and gives him a profit where he might otherwise be compelled to suffer a loss. It is claimed that a bone-cutter pays for itself in eggs, and really costs nothing. Bones are now one of the staple articles of food for poultry, and no ration should have them omitted. They are food, grit and lime, all combined in one, and the hens will leave all other foods to receive the cut bone. If cut fine, even chicks and ducklings will relish such excellent food, while turkeys grow rapidly on it. To meet with success requires the use of the best materials, and green bone beats all other substances as food for poultry.—Rural World.

## COMFORT FOR POULTRY.

### How to Enlarge a House That Has Become Too Small.

On most farms the poultry house is too small for the stock kept. A space of at least eight square feet for each fowl is needed. The cut shows an excellent and cheap enlargement—a shed-roof addition at each end of the present house. Put a partition through the center of the old house and let the



ENLARGED POULTRY HOUSE.

ends into the additions. This will give two large pens, so that two breeds can be kept, Leghorns and Plymouth Rocks, for instance, thus giving one egg and meat the year about.—N. Y. Tribune.

## To Destroy Wasps' Nests.

A very simple and effective plan of destroying the nests of the wasp consists in saturating a piece of soft rag, attached to a slender stick, in turpentine, and then thrusting it into the passage to the nest, stopping up the hole with a piece of turf. It kills every wasp, and there is no necessity whatever for digging them out. Use thoroughly good turpentine, for when it has lost much of its strength it will fail in its action. Such a remedy as this is safe, and quite as good as the dangerous preparations so often adopted. One or two tablespoonfuls of pulverized cyanide of potassium put into the nest at any time of the day forms a good remedy. If quietly done the ingress of the insects is not in the least disturbed. They enter readily, but never return.

Especially in the middle of the day when the bees are at work, approach a hive from the sides or rear, so as not to interfere with them in their flight.

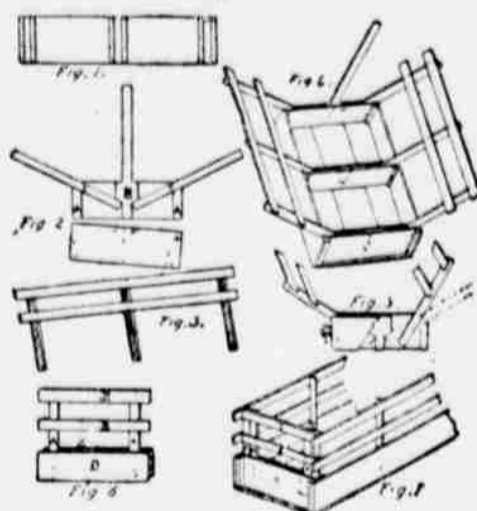
# AGRICULTURAL HINTS

## HAY AND HOG RACK.

### A Combination Structure Which Seems Hard to Beat.

A late number of the Canadian Farmers' Advocate contained the accompanying description and illustrations of a combined hay or sheep and cattle rack by one of its correspondents:

"The accompanying figures represent a combined hay and sheep rack which is easily detachable and convenient to store away under cover. Any ordinary strong wagon box will answer if cleats are put on to hold the double end and center-boards. Fig. 1 represents the side of the box, 1 1/2 inches thick and any desired width and length, with cleats on each end and in the center, nailed on with 3-inch wire nails to receive the cross pieces of the sides of the rack. Fig. 2 represents the front board, which is double. The lower portion of the figure is removed from its proper position to show how the sides are held in place. A is of 2x4-inch scantling, B is of 2x6-inch hard wood. The stake



COMBINED HAY AND HOG RACK.

is to build the front of the load against and hold the lines while loading. These double boards are bolted or nailed with heavy wire nails, well clinched. C is of 1 1/2x4-inch hard wood. The center and hind boards are made the same as Fig. 2 except that no stake is needed. Fig. 3 shows one of the sides held together with bolts or wire nails. A 7-foot rack requires side pieces 3 feet 7 inches long. Fig. 4 represents the hay rack complete. It is necessary to have a good, strong bottom. It is also well to have wagon rods having thumb nuts pass through the box across the center and ends to hold it firmly. A long rack should have four cross pieces. Fig. 5 shows how the sides are lifted off or placed in position. A boy can readily do this. The box is shown 13 inches deep, but 11 or 12 will answer. Fig. 6 represents the end boards for the sheep rack. Standards A are 2x4-inch scantling 3 feet 7 inches long. D is the double backboard 12 inches wide which holds the hind shelving or hurdle in place. B B are nailed to standards A on the outside. Fig. 7 shows the sheep rack. The end boards are placed in position, and the right-hand shelving is put on the left side of the box and the left on the right. The end uprights of the sides slip down between standards A of the end and the sides of the box. This holds the shelvings upright. The end boards slip up and down on C. Fig. 7. The rack is my own contrivance. I gave it a good trial last year and am well satisfied with it."

## HINTS FOR STOCKMEN.

There is complaint against the work done by dehorning clippers and preference expressed for the saw. The clippers are all right if used according to directions.

The balky horse and the swearing driver are two nuisances where the horse should have the monopoly. Keep your temper and in some way get the horse to think of something else. As soon as you do he will go.

Hard roads bang up the feet of the horse, and it is a question if hard roads are not as wearing on the horse as soft roads are. But independent of that hard roads are desirable when they can be had without too much burden to the farmer.

The 1,200-pound hog—and one man claims to have one—is not desirable or profitable. We once saw a pen of ten hogs where aggregate weight was 10,000 pounds. Hogs to weigh must be kept until the second year, and that of itself is not advisable.

Secretary Wilson thinks that hog cholera can be "abolished" and will study the thing from A to Z. It has been studied already, but the more it is studied the worse it is. Feed less corn, breed from more mature stock and keep the hogs under healthful conditions are all the science there is to the subject.—Western Plowman.

## Home Market the Best.

What would a farm be that did not contain a flock of hens? The eggs are considered adjuncts to the farm, and they enter into many of the household dishes. In estimating the profits from poultry the eggs and poultry consumed by the family should be given the same value as though such supplies were purchased. The "family" markets in the United States excel all others, and no farmer should sell his eggs and live on something less desirable, but enjoy the same luxuries as those who are willing to have the best in the cities. Supply the home market first.—Farm and Fireside.

## CULTIVATING GRASS.

### No Crop Grown on the Average Farm Pays Better.

There is no part of farming at the present day so much neglected as the meadow, and there is no crop grown that pays better. The general idea of the farmer is that the meadow does not require any cultivation or care. "The meadow," he says, "is all right. I seeded this field three or five years ago; but I cannot see why I get so light a crop."

It is quite plain you have been robbing the land for three years and returning nothing. Worse than that; you have allowed the moss to creep in and smother the roots which you have robbed of their natural sustenance, without returning anything to them or driving off the moss from the root-bound grass. What kind of a corn crop would you get if you did not cultivate it? To insure a big crop of hay cultivate it. Haul, during the month of December, say from six to eight loads to the acre of barnyard manure and spread it while hauling as evenly as you can with a fork. Then as early as you can get on the meadow in March, or as soon as the frost is out and the ground dry enough to get on with a team, take a good harrow and drag it thoroughly, and then cross-harrow it. You will imagine you are going to ruin your meadow, but you are simply loosening the roots and giving them a chance; and when harvest time comes you will find you not only did not injure your meadow, but greatly increased your crop of grass, and also improved your ground. This matter of cultivating grass is not a mere "theory." It is a principle, proved to be correct by actual trial with profitable results. In 1882 Josiah Bagley, of Serena, from a six-acre meadow took 12 loads of hay, with no after-crop. The following season he manured and cultivated the same six acres substantially as outlined above. Some of his neighbors laughed at him; but about the 10th of July, 1883, he cut 19 loads of grass from these six acres, and in the last of September cut a second crop of nine loads. He says: "I am an advocate of cultivating grass."—J. E. Porter, in Prairie Farmer.

## TREATMENT OF MANGE.

### Recipe for a Salve Which is Said to Produce Good Results.

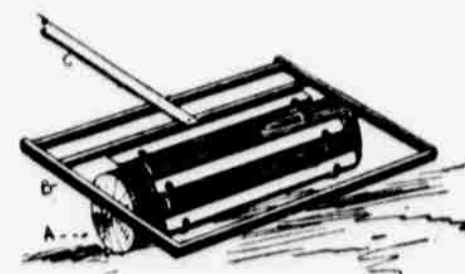
Scurf or mange is sometimes difficult to cure. It is caused by a small mite that burrows in the skin, and to get rid of it the mite must be destroyed. The treatment mentioned has such a tendency, but as the application is most effective when applied locally there has been too much reliance upon the internal treatment. The sulphur internally is not harmful, but it will take too much time; the process is too slow, says Breeders' Gazette.

In the first place, the pens and sleeping quarters should be frequently disinfected with crude carbolic acid and lime. The surface affected should be treated with a salve made as follows: Four ounces of salicylic acid, the same amount of hyposulphite of sodium, eight ounces of cosmoline or lard; and if the lard is used a small amount of beeswax should be added to make the mixture firm. The cosmoline or lard should be melted over a slow fire, and while it is warm enough still to remain a liquid stir in the other ingredients slowly until they are thoroughly mixed. When cold apply to the diseased skin of the hogs every day until a cure is effected. If many hogs are to be treated the amount should be doubled or quadrupled, as the necessities may require. In stirring in the salicylic acid care should be used to keep the face away from the mixture, or the person who does the work will have a violent case of sneezing. The salve mentioned is good for man or beast where there is a violent and persistent eruption of the skin. Do not forget to disinfect the pens and sleeping quarters of the animals. The crude carbolic acid is good, but when applied strong enough to be effective it is likely to make the animals sick.

## FOR CUTTING STALKS.

### A Homemade Contrivance That Does Its Work Well.

A cheap stalk cutter is made by taking a sound log, A, about 4 feet long and 18 to 24 inches in diameter. Blades of steel, B, 3 feet long and 4 inches wide, edged as in sharpening a plow, are se-



STALK CUTTER.

cured to the log as shown in the cut. The shanks that hold the blades should be set forward so that in revolving the edge will strike the ground perpendicularly. A common roller frame is put on and the tongue (C) is fastened behind a cart or wagon, and it is ready for operation. The number of blades to put on depends on the size of the log and the length pieces the stalks are to be cut into. For a log 18 inches in diameter 5 blades will suffice. The log must be heavy enough so that the weight will cut through the stalks.—G. W. Waters, in Ohio Farmer.

## A COPIED CRIME.

### The Terrible Influence of Evil Literature on Youthful Minds.

Some time ago two boys, the oldest under 17 years of age, arrived in this country from Paris. They came in a spirit of adventure to seek their fortunes in the west, but they soon drifted to Louisiana and settled among people who spoke their native tongue. There they became popular, and every one lent them books to read. It was soon noticed that they preferred stories of piracy, lawless love and vicious adventure.

One day—it was in 1896—the little village was startled by the news that a man had been horribly murdered. Investigation showed that he had been surprised in his house, tortured to make him reveal the hiding-place of his treasure, and then killed. He was the richest man in the country roundabout, and living alone, with the habits of a miser, he was known to have large sums of money concealed on his premises.

The brutal crime roused the whole neighborhood. Large rewards were offered for the capture of the murderers. Bloodhounds and detectives were set at work. A poor tramp was arrested, and was barely able to prove an alibi to escape being lynched. But all efforts to trace the assassins failed.

A few weeks after the crime the two French boys showed their employer a letter from New Orleans offering them work at higher wages. Their employer congratulated them and advised them to go; and they went. But the sheriff had some suspicion. He found out at the post office that the boys had received no such letter. He went to New Orleans, and the boys were not to be found at the address they had given. He tried to trace them, but they had disappeared completely.

Some months after this two very ragged youths presented themselves at a plantation near the scene of the crime, and asked for work. They showed signs of great suffering and poverty. They were emaciated and ravenous. They were recognized as the same two brothers who had left the neighborhood to go to New Orleans. The sheriff soon heard of their return, and arrested them on the charge of murder. Overcome with terror, they broke down and confessed the deed. It was a miserable story of two guilty and haunted souls.

"The face of the dead man followed us everywhere," they said. "We couldn't get away from it."

The sheriff questioned them, and found out that in one of the dime novels which they were in the habit of reading a murderous plot had captured their depraved fancy and enticed them to a career of crime. This book told how an old miser was robbed, and finally killed, and how the ruffians escaped to enjoy their booty. They determined to reproduce the bloody description in real life, and spent some weeks in planning the fatal work.

They traveled in luxury on the proceeds of their murderous theft. They tried every amusement, every excitement; but they could not be happy. In vain they endeavored to banish the agonized countenance of their victim. It was as if some chain bound them to the scene of their atrocity, and the farther away they went the more inexorably this strange power pulled them back. Tortured by remorse, miserable and starving, these poor dupes of a wicked book drifted to their doom as surely as a boat caught in the eddies of the maelstrom.

Both brothers were sentenced to death. Perhaps they will have suffered the extreme penalty of the law before this story reaches our readers.

Fascinate a boy with a book, and he will do what he reads. They who throw criminal fiction—or the details of real crime—in the way of the youth are enemies of mankind, sowing the seeds of sorrow and death.—Youth's Companion.

## PROGRESS IN AERONAUTICS.

### Greater Last Year Than in Any Previous Year.

The advance toward the full solution of the problem of manflight which was made in the year 1896 was greater than that of any previous year. Saving the sad death of Lilienthal, the chronicler's pen has only good news to tell. In times past the extreme difficulty of determining what were the best methods of work was the deterrent which kept investigators from entering the field of aeronautics, and consequently the world's workers were comparatively small in number. Now this condition of affairs no longer obtains, for the demonstrations of 1896 were such that the best lines for investigators to follow are very clearly marked out. These lines, three in number, distinct, yet convergent, are as follows:

1. The development of the self-propelled aerodrome.

2. The development of the motorless air-sailer.

3. The development of the motor.

In each of these departments of work there is now a well-defined point of vantage which is accessible to every intelligent experimenter who is inclined to carefully study the ground already traversed, and so to fully understand the results already reached. Which ever branch of work is seriously undertaken by an individual, he may be sure that, while working upon his own specialty, he is helping those engaged in others toward their common goal.—Aeronautical Annual.

—Tatiana is the name given to the czar's second little daughter.