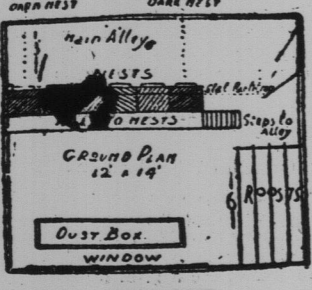


CHEAP POULTRY HOUSE.

It is Not Fatal by Any Means, But Plenty Good Enough for Ordinary Purposes.

This building, designed for about 25 hens, could also be built in duplicate with the main alley running the whole length of the connected buildings and in front of the different sections, about 25 hens to be kept in each.

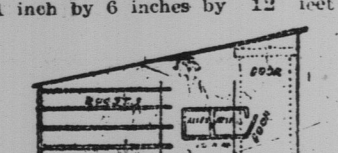


It is intended to be built of rough hemlock, the price of which is based at ten dollars per 1,000 feet, although I have bought at six dollars, but it is my purpose not to underestimate. I have just finished a similar poultry house of mill slabs doubled, with a space between, which was packed with straw, and battened with slabs. The ground space was filled up with loose stone thrown in until on a level with the bottom of the sills, and then dirt spread over the stone and tamped down hard. This filling is cheap and the stone allows the moisture to go through and the dirt floor is always dry. However, if a board



GENERAL VIEW. (Dimensions Marked in Feet. One Corner Showing (A) Roost and (B) Box to Catch Droppings.)

below is an itemized list of lumber and other supplies: Two hundred and sixty feet of ten-foot inch boards for siding (including waste); 221 feet of 14-inch boards for roof and nests; two pieces 2 inches by 6 inches by 14 feet, and two pieces 2 inches by 6 inches by 12 feet for sills; eight pieces 2 inches by 4 inches by 14 feet for plates and cross beams; four pieces 1 inch by 6 inches by 12 feet for



window casing; two squares of felt roofing at \$1.50 per square, including nails to make one roll building paper 500 square feet, 60 cents; netting 6x16 feet, 70 cents; 10 lbs. of wire, 50 cents; two prevent straps supplies, \$1.45 at market price; \$2.50. Total cost of lumber and other supplies \$29.81. The waste material can be used where there is some on hand. The labor would occupy a carpenter with one man to help about two days.

Prepare Small Fruits for Winter.

The fruit grower must be a willing worker, and to be successful he must be a pusher and ever ready to take time by the forelock. He must be in advance, rather than behind, with the work. The mulch for the strawberries and compost for raspberries, blackberries, currants, gooseberries and Lucretia dewberries should now be ready near the garden. As soon as the ground is frozen hard enough to bear up the horses and wagon put the mulch on the strawberry bed. Spread evenly and thickly enough to give good shade to the plants. Do not undertake to dig, for if this is done the wet snows will pack the mulch and smother the plants. Good judgment is required here.

Straw of any kind, corn stalks, with or without the blades, leaves, evergreen boughs, swamp grass or any coarse material that is free of seed will answer. This mulch should be left on the bed until all danger of freezing is over, which should be raked of the plants to the space between the rows. If the soil is loamy and light the mulch may be started over the plants and left in that way to prevent the earth from being splashed upon the fruit.

For other lines of small fruit, compost is preferred to strawed mulch, as the latter invites mice which will gnaw the canes and injure the plants. The compost may be scattered broadcast over the entire surface as the condition of the ground demands, or be placed in rows on the hills. In either case the compost should be worked into the soil by means of a shallow cultivator or as early as the ground is in condition for work. To do a perfect job the surface should be worked until thoroughly fine. Working should be repeated at intervals of six and eight days until raspberries and blackberries are turning red. Small fruits cannot be successfully grown without thorough cultivation and pruning season after season. When the grower becomes experienced, the work in the small garden will be considered more of a pleasure than a task.

Little Brother—I don't think I care much for that book. Little Sister—Why not? Little Brother—Grandma says it's as attractive as well as amusing.

WHAT IT COSTS TO KEEP A HEN.

L. E. Keyser Relates Some of His Very Interesting Experiences.

Where one keeps but a few hens and purchases the feed from the grocer the expense nearly, if not quite, equals the value of the eggs produced. In scientific, systematic and economical feeding, the profit in the poultry business, whether we are feeding for meat or eggs. To produce a ration that will carry a flock through the year, and at the smallest possible expense, requires considerable study. There are very few who know just what the food consists of their flock has really cost, or what its nutritive value has been.

A ration for laying hens should contain a considerable variety of grains, grasses and roots to tempt their appetites, and should be rich in egg-forming properties, the nutritive ration being about one to four. This can be produced with cut clover, bran, corn-meal and middlings mixed with a mash, and whole grain—corn, wheat, buckwheat and as many more of the grains as can be obtained—for the evening meal. In the addition of raw cut bone twice a week. Beets, carrots, and small potatoes cooked and added to the mash will greatly increase its appetizing qualities and somewhat lessen the cost. Beets, carrots and cabbage can also be fed raw to good advantage.

Of such food a large hen will consume about one-fourth of a pound per day, and it should be made sufficiently bulky by the addition of clover and bran to the mash, so that this amount will give her at least two full crops. At the present prices of grain, and allowing that roots cost fifteen cents per bushel, a hen may be kept in confinement on the above ration at a cost of seventy-five cents per year. I have, by careful buying and judicious blending of the food products, kept hens satisfactorily at an average cost of fifty-six cents each per year.

I find buckwheat one of the best whole grain foods for hens. They never become cloyed on it and it is a great egg-producing grain. In experiments made in feeding during the winter, where the evening feed had been wholly of corn, I found that the substitution of buckwheat materially increased the egg yield. Kafir corn is a grain that should receive more attention from poultrymen. While its nutritive value is about the same as that of Indian corn, it is relished much better by fowls and seems to produce more eggs. When one raises his own grain I prefer to feed both buckwheat and Kafir corn, unthreshed, as working it out of the straw gives the hens exercise, and the high nitrogen content, and where it can be produced cheaply, is an excellent addition to the list of grains. In some sections of the country it is as low as thirty cents per bushel. I have only used it in an experimental way for young chicks, it being too high-priced in this section to allow of its extensive use.

I prefer to feed but twice a day, especially during the winter, not only on account of the lessened labor, but because I deem it sufficient. If fed three times a day the hens are apt to wait for food instead of scratching for it. Where the mash is fed in the morning they usually secure a full crop and I prefer to feed the mash at night, and in the dust bath until they become hungry, when they will be scratching and find some of the stray kernels that were left from their last grain feed. Where hens are inclined to be lazy, it is a good plan to feed the mash or soft food at night, letting them work for their breakfast in the morning.

Where fowls are given free range or confined in extra large grass-grown runs, and one has the land to produce all the feed required, it is possible to keep the expense down to thirty cents per annum, and this is the course to be pursued by those who would make a profit on ten-cent eggs, and where hens are rightly managed they can be made to yield a good profit with eggs at this price during the summer season.

For Carrying Heavy Boxes.

One of the unhandy things to move upon the farm is a heavy box which has no handles or other projections. The illustration shows a contrivance that permits two persons to pick up a heavy box and walk off with it, blacksmith from an old chain and a rod of iron can make the affair in a few moments. A pole can be slipped through the upper links of the chain to take hold of.

Hogs Require Some Minerals.

A great many experienced farmers in the corn belt feel that, independent of the grain feed, our hogs require some mineral substance. The following is the new feed for over a year. Two parts oil-cake meal, four soft coal, four wood ashes or charcoal, one air-slacked lime, one salt—the above by measure. I feed all pigs all of this they will clean up at one feeding once a week. I believe that this mixture, and the feeding of other grains besides corn, obviates much of the bad effect of an entirely corn ration, and increases size and strength of bone and muscle, and improves the general health and vigor of the animals.—Correspondent Wallace's Farmer.

Live Stock Jettison.

Milk quickly, clean quietly and regularly. Pony breeding is one of the most lucrative lines of work. Breeding trotting horses will do for the millionaire, but it is usually a poor business for the farmer.

HANDY FEED TROUGH.

Hogs Cannot Drop Anything Into It, Neither Can They Their Dirty Feet In It.

The feeding trough which I use is of different lengths, according to the number of hogs in each pen. I make them 8, 12 and 16 feet long. The bottom is made by two 2 by 10 grooved planks. On the top of these planks I spike five pieces 2 by 4, 20 inches long, equal distance apart. These are set on edge (not flat), but before I spike them on I cut a piece out in the center 2 inches deep and 4 inches long. Then I spike one 2 by 4 on each side of this cut, 22 inches long. This 2 by 4 is also nailed to the bottom of the trough, 4 inches apart at the bottom and a space of 14 inches at the top. Then I take an 18-inch board and nail on each side "on the inside" of these upright 2 by 4's, but I let these side boards drop into the cut made in the bottom 2 by 4, so the boards are only 2 inches from the bottom of the trough and have a 2 inch clear space at bottom, where the clear feed can come through. When I have this all done, I nail a 1 by 4 on all sides, which makes the trough 2 inches deep. Then nail up the end tight as high as the standards and then trough is given for a 10-foot long trough and for old hogs. If the trough is wanted for young shoats from three



HANDY FEED TROUGH.

to eight months old I use a narrower bottom; a 10-inch bottom is wide enough for little pigs. The 20-inch is too wide for the little fellows, as they will get in with their front feet. These boards that are put in centre of trough are to keep the hogs from getting in with their feet and prevent spilling feed and stop on their heads and ears. I think this is the cleanest way of feeding hogs and beats the feeding floor all to pieces. I never saw a feeding floor yet but what the hogs would leave their offal on it while they were feeding and they would have to clean up their feed in their own droppings, but in this kind of a trough they cannot do anything, neither can they get their feet in it while they are full of mud.—Cor. American Westerner.

SALT AND WOOD ASHES.

A Good Mixture to Some of Which the Editor Has Had Experience.

Occasionally some one rises up and emphatically condemns the use of salt for hogs, but fails to give the reasons for his objection. It is just as reasonable to say that man does not need salt. The digestive organs of the hog are nearer to those of man than any other animal. If hogs had no relief for salt, it would give some ground for such a statement, but hogs are often killed, and that very suddenly, by getting an overdose of it, and they take this overdose because they are craving for it. Prevent this craving by a liberal supply.



TAMWORTH BOAR UNDER ONE YEAR.

First Prize from the American Society, owned by H. George & Sons, Crampton, Ont.

Apply constantly before them and they will eat so much of it as to be sickened and killed. With man the amount used is considerably a matter of training and habit. Still, we should be content with the amount of salt we use. There is very little danger of swine eating so much of the mixture that the salt will be injurious. If the ashes are from hardwood and unleached, they are much better because they rid the system of worms. But if we could only get the leached ash, feed them salt alone, but get them accustomed to it, before giving free access to all they want.

Educate Colts When Young.

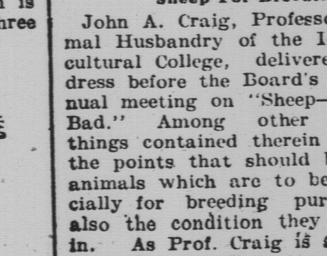
Educate the colts to the halter when very young, and it will save time and more or less trouble. Don't commence pulling at it in a straight line, but always at an angle, or, what is better, put a small rope around his body just in front of his hips in a slip-noose form, then pass the other end between the front legs and under the noseband, give a sudden jerk on the rope you have tied around his body, and he will immediately spring forward, which is the direction you wish him to go. Whatever happens at the forward end makes him go backward, and at the rear and forward. This is the natural law governing the colt's action.

Almost every day the killing of people by lightning is announced. The man who will go into a pasture where there is a bull, with no means of protection, would seem to value his life lightly. The bull cannot be trusted.

A SWINGING TROUGH.

It is Out of the Way When the Pen Needs Cleaning.

The trough or feed box shown in the illustration is suitable for either fowls or swine. It is the ordinary V-shape, and is held in place by a stout bar at either end. These bars are bolted to the sides of the pen. Either iron or wooden bars may be used. When the trough is not in use it is turned up against the wall, out of the way, and fastened there. The advantage of such a trough is that it is out of the way when it is desired to clean out the pen. Any accumulation of sloped over food, to become offensive, is avoided by it.



SWINGING TROUGH.

John A. Craig, Professor of Animal Husbandry of the Iowa Agricultural College, delivered an address before the Board's recent annual meeting on "Sheep—Good and Bad." Among other interesting things contained therein he outlines the points that should be looked for in animals which are to be used specially for breeding purposes, and also the condition they should be in at the time of selection. The author is an authority on all matters pertaining to sheep, the following may be profitably read and considered by all who are interested in this industry. The ram should show masculinity in many features. In those breeds that have horns, the latter should spring from the head and turn clear from the face. In all rams the face should be broad between the eyes, somewhat short, and with a Roman nose. The crest, or scrag, should be thick and rising, and the neck full. A point deserving emphasis is the depth of the chest. The body should sink deep between the forelegs, and the ribs back of the shoulders should be deep and round, making the girth deep and prominent and wide—two features that are indicative of a strong constitution. A live fleece that is, on this way, injurious, not dead to the touch, and especially a dense, thick covering of belly wool—is also indicative of vigor. For the same reason, the reason, in those breeds that are woolled about the head, the more complete and dense this covering is the better it is liked. The legs of the ram should be straight and strong, and short. In movement the ram should be bold and confident. A ram should never be so heavy in flesh as to be useless in service, as in too often the case with the show ring. The flesh should be even and firm, and not gathered in masses or rolls at any part of the body. It is the depth of the chest, the girth, the live condition is likely to make the ram unwieldy in the show ring, and render a ram useless for breeding purposes.

The ewe should be rather long in the face, with fine features. The neck should be slender and without any depth of the throat. The body should be deep, round-ribbed, and especially long, so as to provide room for the growing lamb. The type of the ewe should be that of the good dairy cow, which is typical of the good dairy cow. The ewe that milks well, and consequently the force of her milk tends toward the wedge shape, deep in the chest, large bodied, and wide across the loins and hips. The condition of the ewe should not be such as to impair her breeding qualities. Excessive fatness, as a rule, is in this way injurious. The flesh should be evenly distributed and not gathered in bunches about the tail-head, and it should be firm and not too fatty.

As a result of our consideration of the good and bad qualities of sheep, there arises the more important problem of breeding to produce the former and to remove the latter. I have failed to find, up to this day, where success has been achieved by in-and-in-breeding, cross-breeding, or any other form, but that there was a man behind the system who knew well the merits and demerits of the animals he was breeding. And further, knowing these, he made his selection to get the best blend. This is the basis of a method of breeding that arises from what has gone before. For want of a better term, I have named it "balanced breeding," and I believe that this method has the means of developing and adding to the good qualities, and at the same time lessening and removing the demerits of our domestic animals.

To follow balanced breeding in sheep would mean the selection of rams with the leading thought of removing the weakness of the flock. When one realizes the force of balanced breeding, and acts on it in the selection of rams, it is wonderful what strides may be made toward perfection in a few years. With this view we correct a deficiency of the fleece, and yet retain the good qualities of form; with another we add a little more bone; another deepens the flesh on the valuable parts; and so on, each marking a new advance. For judgment keep discarding new features to be obtained in each additional effort.

Ventilate the stables and keep them clean. Permit a hog to break through a fence once and it will give you trouble as long as it lives and has had a fence that it can get through.

SELL MATURED STOCK.

There's No Profit in Keeping Cattle or Hogs After They Have Been Fattened Fairly Well.

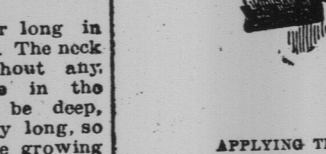
There is no profit in keeping any kind of stock when they have been fattened for the market; the retention of cattle or hogs that have corn served only to maintain their present condition in unwise and unprofitable. When they are fat sell them; you cannot afford to continue feeding them in anticipation of higher prices, regardless of the cheapness of the feed. If a hog is fat and ready for market at 200 pounds sell him, as no appreciable gain can be made after this period has been reached, on the other hand there is some danger of the animal going back, or losing fat; so it is best to place the stock on the market after the finishing touches have been put on, and yield not to the temptation, which is a strong one, to hold on for better prices, which may and may not be received. If cattle and hogs have been judiciously fed and are of good breeding they will nearly always bring a remunerative price and pay handsome returns for the labor and expense involved in their preparation for the market.

Another thing—the local buyers who visit you every week or two to get stuff to send to Chicago, St. Louis or Kansas City and who of course make considerable profit thereby, should be sent to "the other fellow," as any farmer can ship his own stock, cattle, hogs and sheep, just as cheaply as the local buyer can, and thus secure the profit which the latter usually receives. He may not have a load, but the buyer may be confronted with the same difficulty; then the thing to do is to see a neighbor or two who may have stock to ship and thus make out the load. It pays to save money wherever possible; this is one of the places where it is possible. The reason many farmers do not act in this regard as advised is that the little trouble of getting a car, loading the stock and carting for it during shipment frightens them and they are content to sell to the local buyer at less money than undergo the trouble and receive higher prices.—Farmers' Voice.

USE OF THE KILLING KNIFE.

A Feather Nest Will Surely Help the Uninitiated.

The following method of killing for market renders the use of the sawing knife simple and effective even when practiced by the beginner. Tie the legs of the bird together just above the feet, and place it in a bag especially made for the purpose. For fowls the bag should be about 20 in. long, 10 in. wide and 5 in. deep. For the same reason, the bag should be about 15 in. wide and 5 in. deep. The fowl is placed in the bag.



APPLYING THE KNIFE.

head foremost. Owing to the shape of the bag the fowl slips down to that part of the bag that fits it after the style of a legging. The head of the fowl comes through the small opening at the bottom of the bag.

In the case of fowls above the average size, the smaller end of the bag may be doubled back, while in the case of a fowl smaller than the average, the larger end of the bag may be doubled back, as indicated in the illustration. The fowl is then hung against the wall as shown. The little frame or the killing knife is not a necessity, but is a great aid especially for beginners. Its construction is readily seen from the illustration. On looking into the mouth of the fowl it will be found that there is a slit in the roof, which is crossed at a right angle by small whitish fringe. It will be noticed that there are several of these fringes; the fringe situated furthest away from the point of the beak is larger than the others. With a poultry killing knife a stab is made just beyond the point of the beak. Having opened the fowl's mouth in the manner described above, being careful to hold the head firmly between the first and second fingers, as seen in the illustration, next take the instrument in the right hand, having the knife level side uppermost, protruding through the frame about 2 in., then place the legs of the frame firmly against the wall and gradually and slowly push the knife forward until the point of the knife is about level with the end of your thumb-nail (see illustration); next being careful to keep all the cutting edges of the knife parallel to the ground) quickly and with a good strong push drive the knife home as far as the frame will let it go. If the operation has been carefully carried out as here indicated, the knife will have severed the brain from the rest of the body and will have cleanly cut the large blood vessels of the head. The fowl will bleed sufficiently to give the right appearance to the flesh and is in much better shape for market than when killed by most other methods.

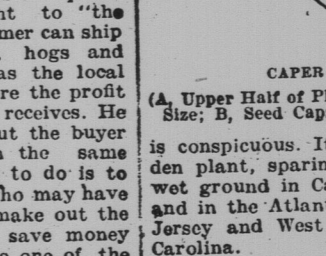
Too Much for a Certain Grade.

Mrs. Homespun (indignantly)—Here is an article that says that in Vermont a wife costs five dollars. Mr. Homespun (thoughtfully)—Well, a good wife is worth it.

THE CAPER SPURGE.

Its Story as Told in Bulletin No. 98 of the United States Department of Agriculture.

This plant is called also garden spurge, myrtle spurge, mole plant, mole weed, mole tree, gopher plant, wet caper, caper bush, wolf's milk, and springwort. Description and Where Found.—This is a smooth, herbaceous, milky-juiced perennial, two to three feet high, with a stiff erect stem and opposite four-ranked leaves, the lower of which are thick and oblong, the upper, thin, broad and heart-shaped. The flowers are greenish yellow and rather small. The three-seeded fruit



CAPER SPURGE.

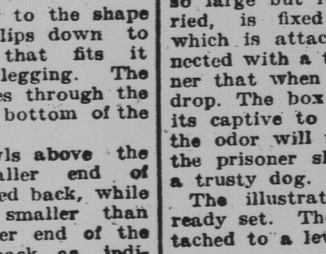
(A, Upper Part of Plant, One-Third Natural Size; B, Seed Capsule, Natural Size.)

is conspicuous. It is a common garden plant, sparingly introduced into wet grounds in California and Texas, and in the Atlantic States from New Jersey and West Virginia and North Carolina. Poisonous Properties.—The fresh milky juice is exceedingly acrid and the fruit is highly purgative and effect often lasting for several weeks. The seed taken internally in overdose will inflame the mouth and stomach, and cause intense diarrhoea and vomiting. If the dose is sufficient there will be nervous disorder, unconsciousness, general collapse and death.

AN EFFECTIVE SKUNK TRAP.

Plan Whereby Any Handy Man Can Make One Easily.

Skunks are a nuisance about a farmhouse or barnyard, and where they get into the habit of raiding the chicken yards, must be gotten rid of at any cost. Often they are allowed to make and occupy nests in the vicinity of the barn or house and remain undisturbed on account of the disagreeable consequences an interference would bring about. The average man would rather board the lion in his den than risk an encounter with a skunk. A pair of these animals made their abode beneath the floor of a neighbor's summer kitchen and as the floor was not tight, got into the habit of coming into the room above. The farmer captured them by use of the trap shown in the illustration.



TRAP READY FOR THE SKUNK.

A small-sized dry goods box, not so large but it can be easily carried, is fixed with a trap door which is attached to a lever connected with a trigger in such a manner that when sprung the door will drop. The box can be carried with its captive to a safe distance where the odor will not be disturbing, and the prisoner shot or dispatched by a trusty dog. The illustration shows the trap ready set. The trap door, a, is attached to a lever, b, which rests on

True Value of Farm Crops.

The products of the farm can be changed, in value according to the kind of crop. Every article has a commercial value where it is grown, as it will be worth something, be it much or little, but there is also a feeding value which represents the use to which it may be applied with the view of deriving a profit from it. An article may be worth more for feeding on the farm upon which it is grown than to a purchaser, as the purchase necessitates the cost of transportation. A farmer can therefore feed his home grown articles with less expense than he can feed articles purchased and brought on the farm.